



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	08/30/2017
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	49.69	6.58	56.27	68.20	-11.93	peak
2	5700.000	52.49	6.68	59.17	105.20	-46.03	peak
3	5720.000	54.35	6.73	61.08	110.80	-49.72	peak
4	5725.000	55.86	6.74	62.60	122.20	-59.60	peak
5	5850.000	54.15	6.99	61.14	122.20	-61.06	peak
6	5855.000	56.50	7.00	63.50	110.80	-47.30	peak
7	5875.000	51.42	7.05	58.47	105.20	-46.73	peak
8	5925.000	48.58	7.16	55.74	68.20	-12.46	peak

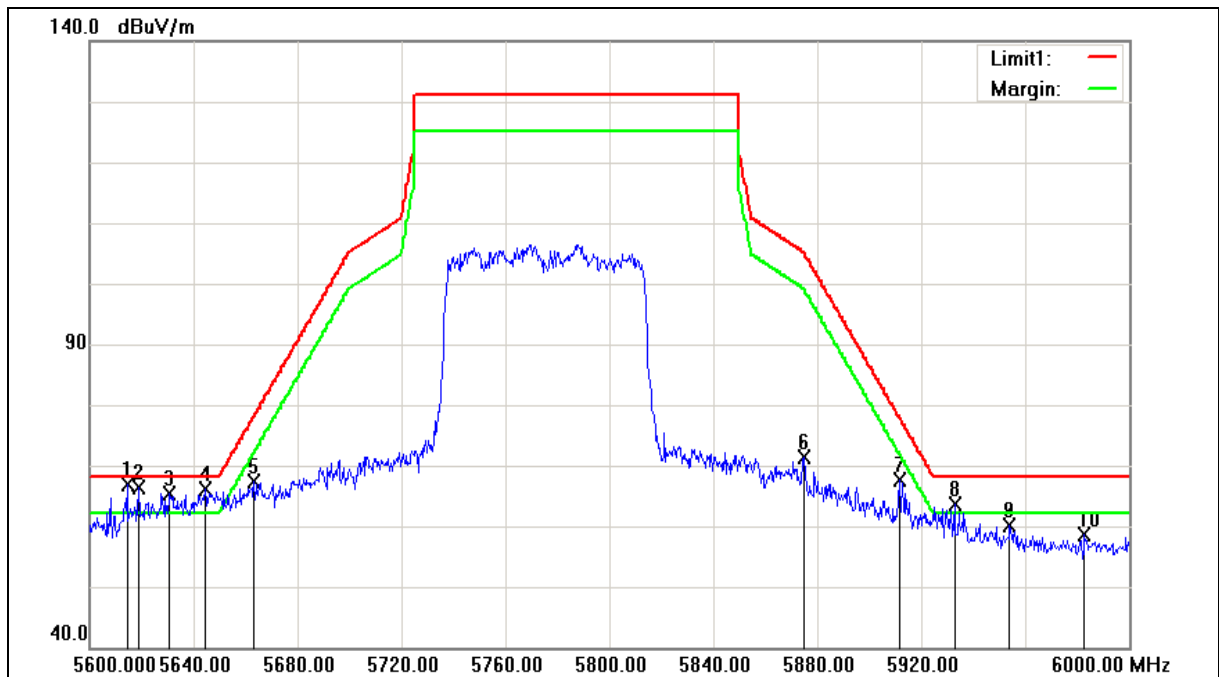
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	08/30/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	08/30/2017
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5614.400	60.28	6.50	66.78	68.20	-1.42	peak
2	5618.800	59.79	6.51	66.30	68.20	-1.90	peak
3	5630.800	58.93	6.54	65.47	68.20	-2.73	peak
4	5644.400	59.46	6.57	66.03	68.20	-2.17	peak
5	5663.200	60.70	6.61	67.31	77.97	-10.66	peak
6	5874.800	64.32	7.04	71.36	105.26	-33.90	peak
7	5911.600	60.44	7.13	67.57	78.12	-10.55	peak
8	5932.800	56.41	7.18	63.59	68.20	-4.61	peak
9	5954.000	52.80	7.22	60.02	68.20	-8.18	peak
10	5982.800	51.45	7.28	58.73	68.20	-9.47	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Beamforming on

Below 1GHz

Standard:		FCC Part 15.407		Test Distance:		3m	
Test item:		Harmonic		Power:		AC 120V/60Hz	
Test Mode:		Mode 1		Temp.(°C)/Hum.(%RH):		26(°C)/60%RH	
Description:				Date:		08/31/2017	
Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
490.7500	37.45	0.41	37.86	46.00	-8.14	QP	H
518.8800	38.58	0.98	39.56	46.00	-6.44	QP	H
702.2100	28.11	4.48	32.59	46.00	-13.41	QP	H
725.4900	29.65	5.01	34.66	46.00	-11.34	QP	H
853.5300	27.72	7.42	35.14	46.00	-10.86	QP	H
934.0400	28.23	8.93	37.16	46.00	-8.84	QP	H
493.6600	32.03	0.46	32.49	46.00	-13.51	QP	V
499.4800	38.56	0.56	39.12	46.00	-6.88	QP	V
522.7600	37.21	1.07	38.28	46.00	-7.72	QP	V
538.2800	31.06	1.42	32.48	46.00	-13.52	QP	V
742.9500	28.64	5.39	34.03	46.00	-11.97	QP	V
935.9800	27.92	8.97	36.89	46.00	-9.11	QP	V

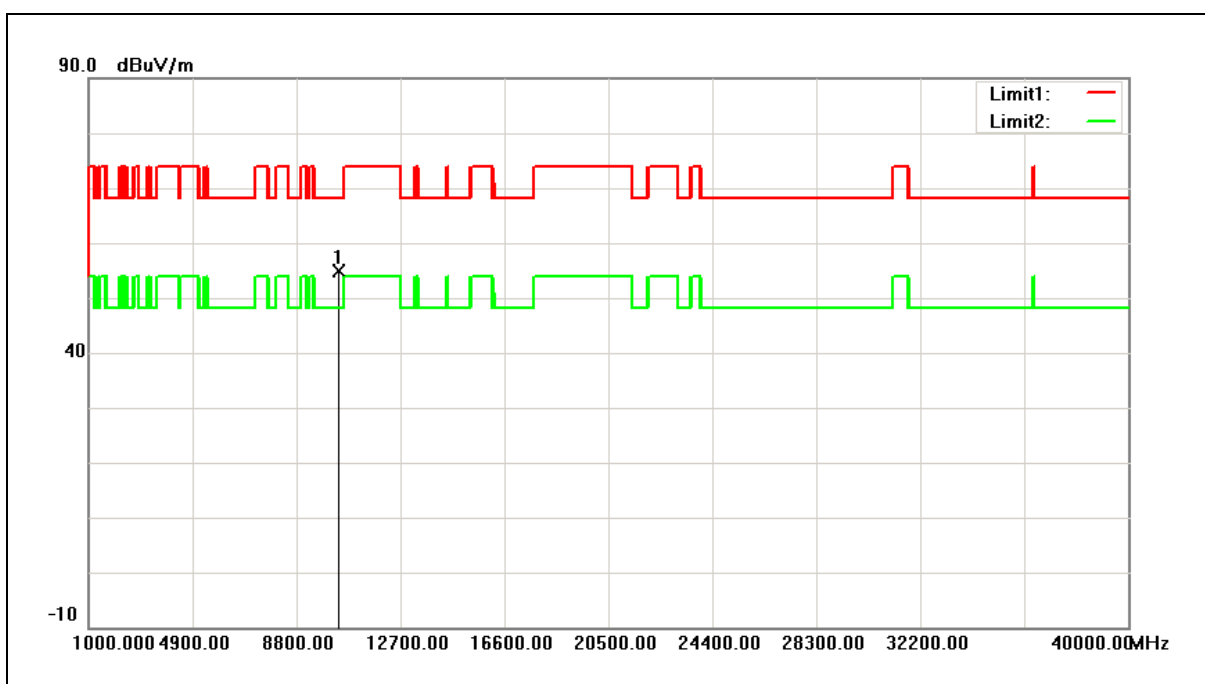
Note: 1. No emission found between lowest internal used/generated frequency to 30MHz (9kHz~30MHz).

2. Result = Correction factor + Reading

3. Correction factor = Antenna Factor + Cable loss – Pre-Amplifier gain.

Above 1GHz

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5180MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	51.90	2.93	54.83	68.20	-13.37	peak

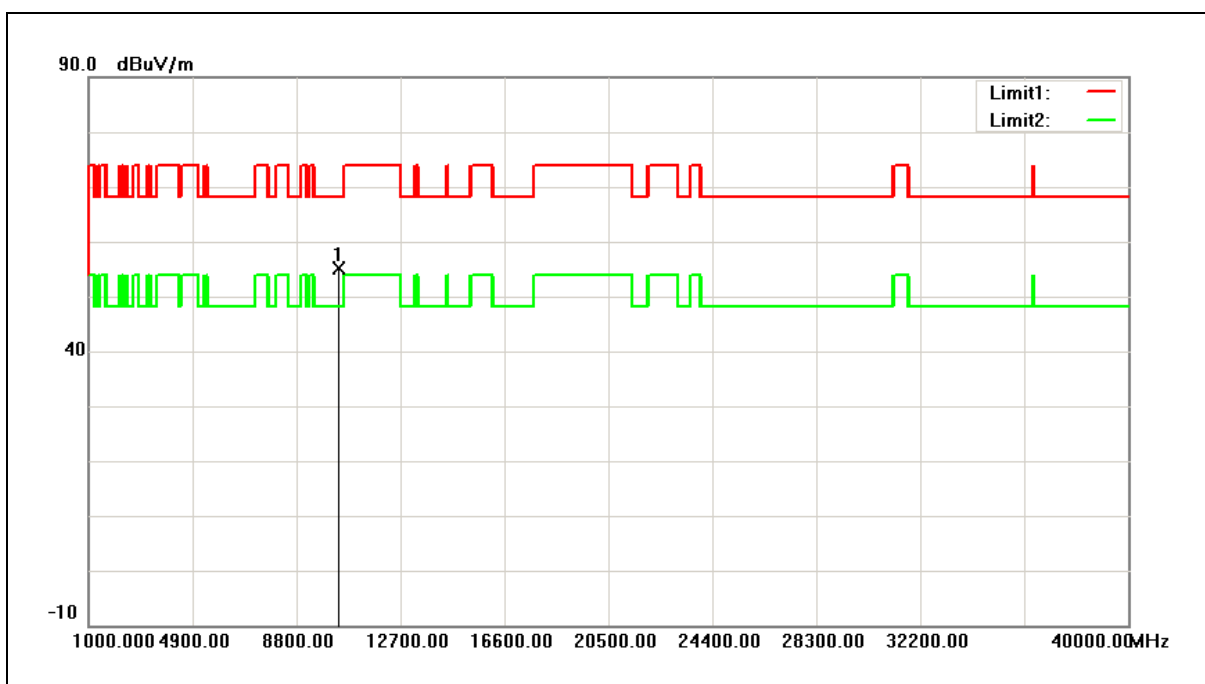
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5180MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10360.000	52.21	2.93	55.14	68.20	-13.06	peak

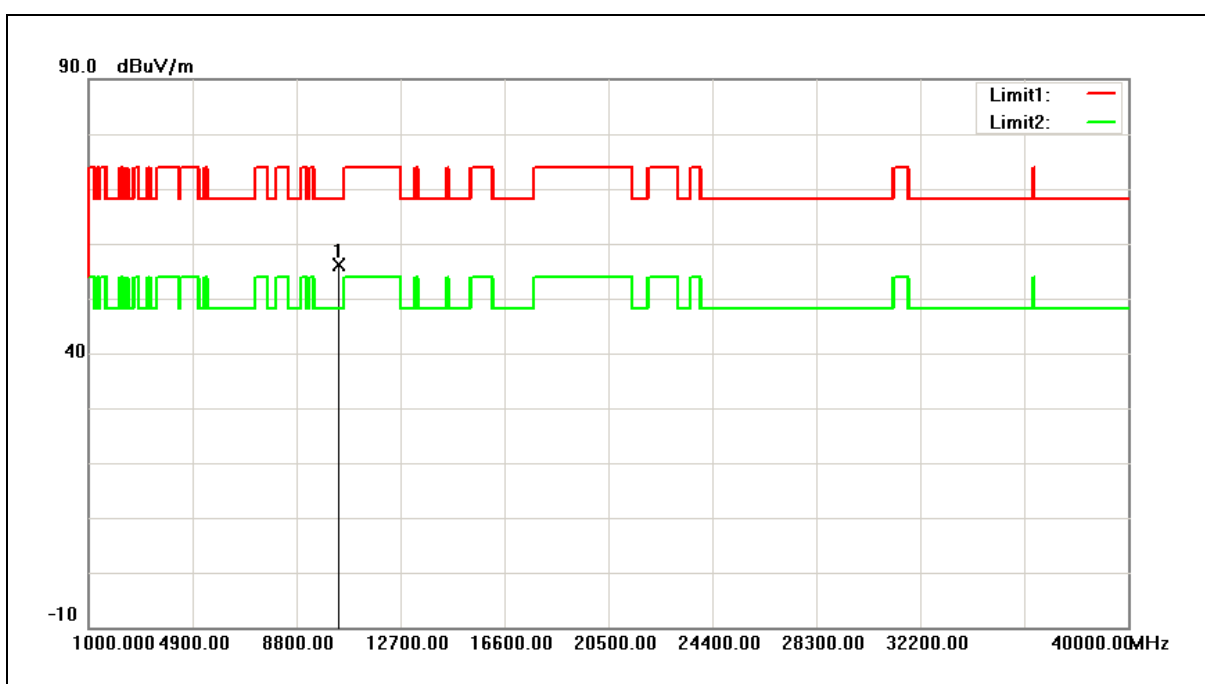
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5200MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



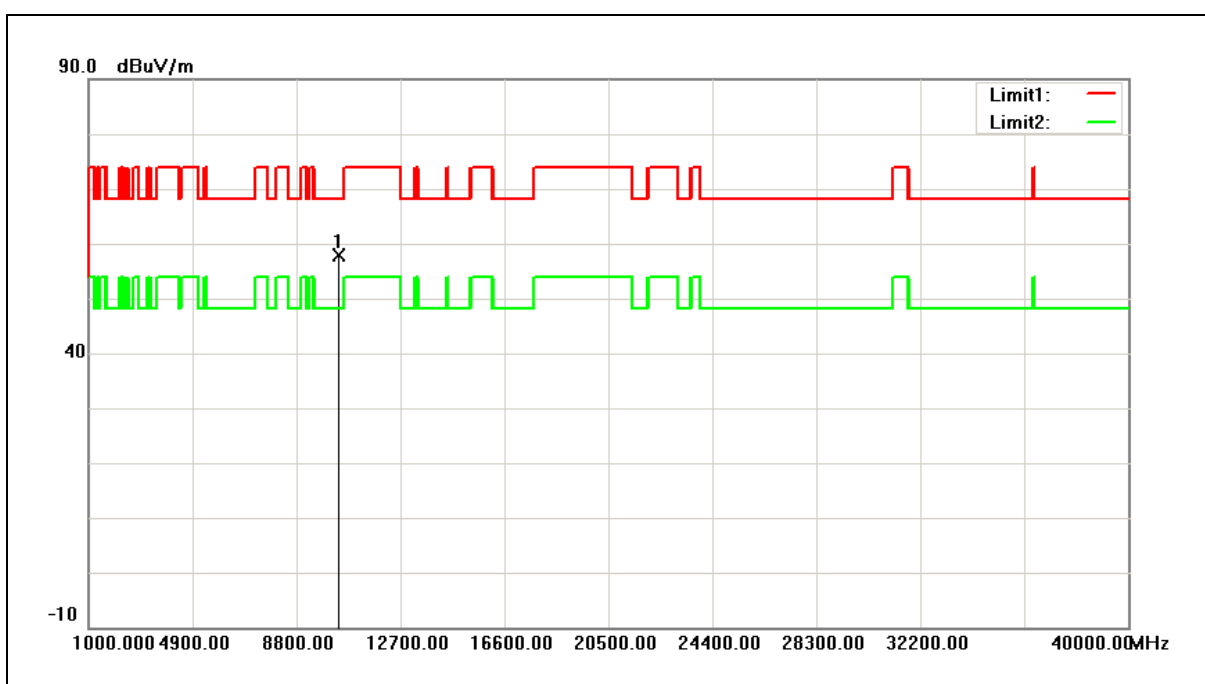
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	53.19	3.02	56.21	68.20	-11.99	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5200MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		



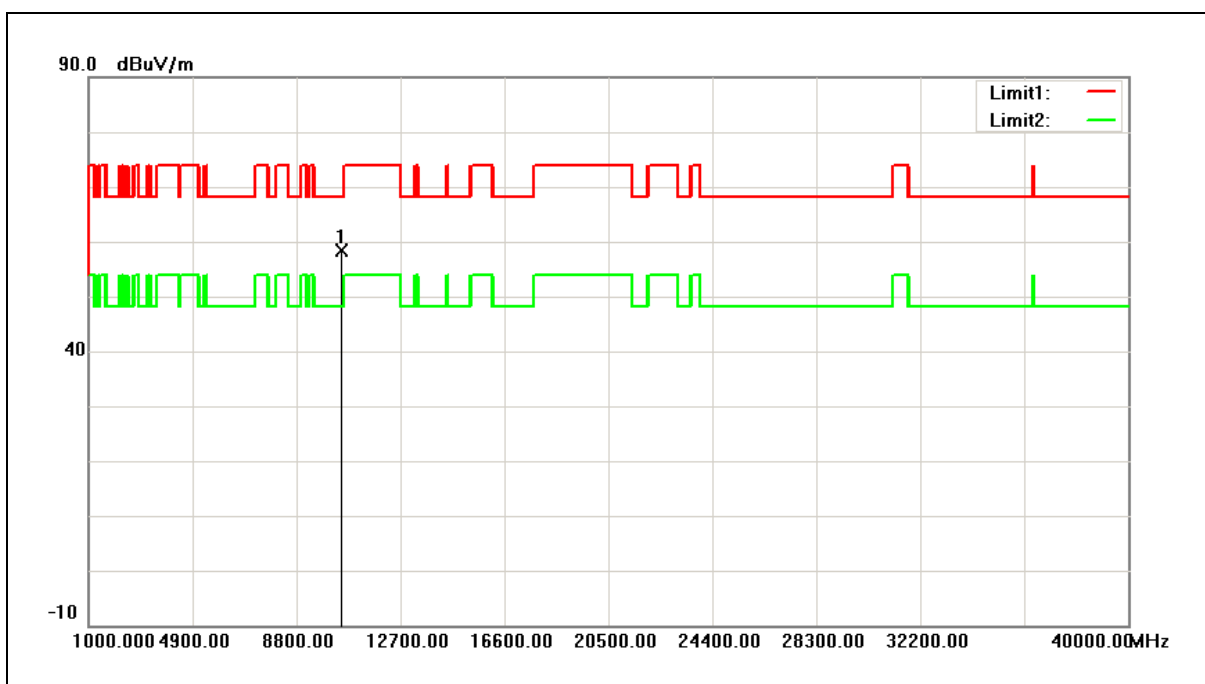
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10400.000	54.87	3.02	57.89	68.20	-10.31	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5240MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



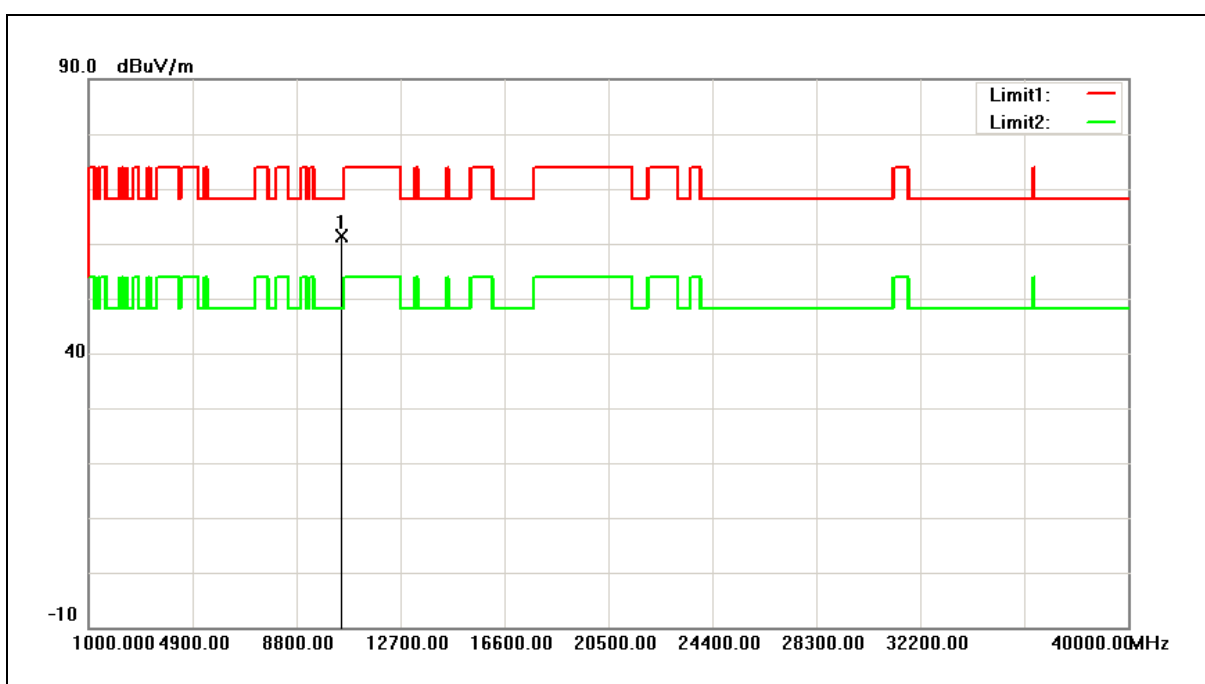
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	55.26	3.19	58.45	68.20	-9.75	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5240MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		



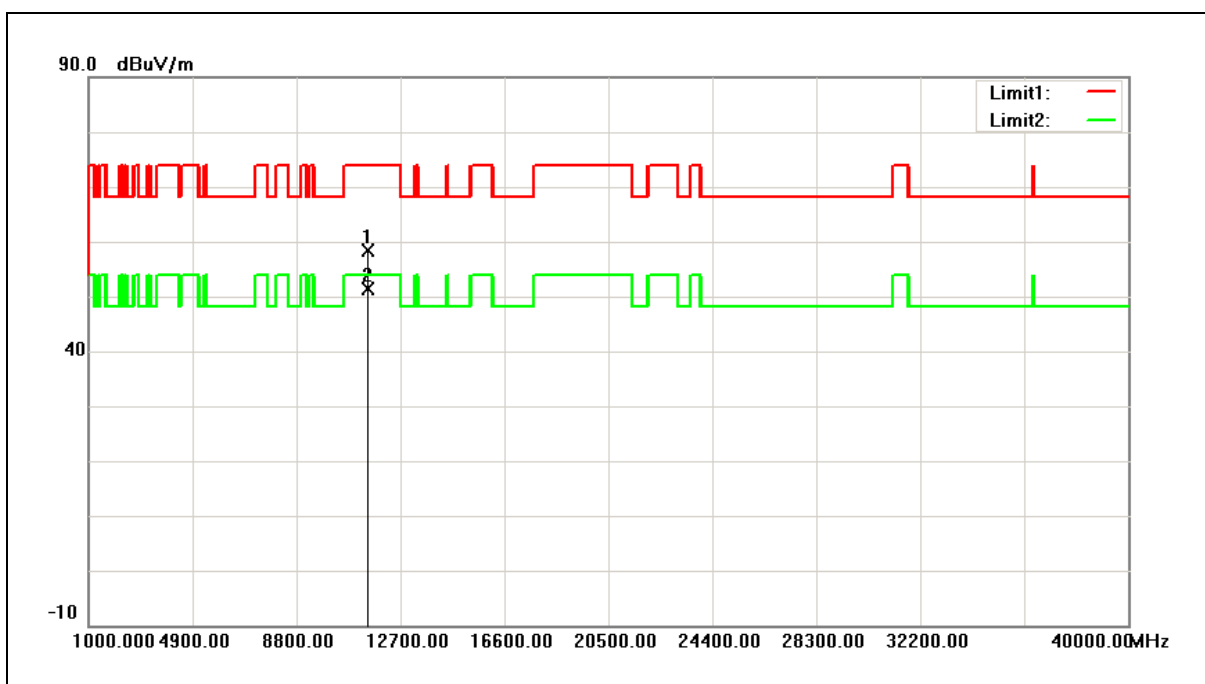
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10480.000	58.25	3.19	61.44	68.20	-6.76	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5745MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



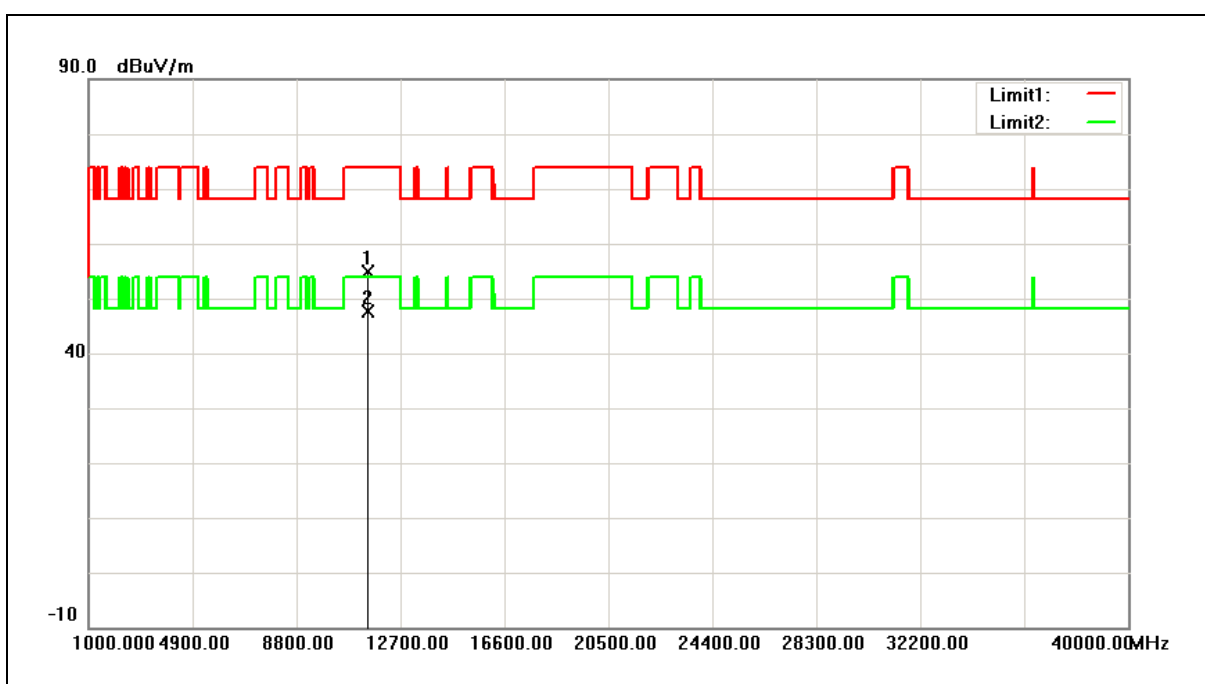
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	54.33	4.06	58.39	74.00	-15.61	peak
2	11490.000	47.31	4.06	51.37	54.00	-2.63	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5745MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		



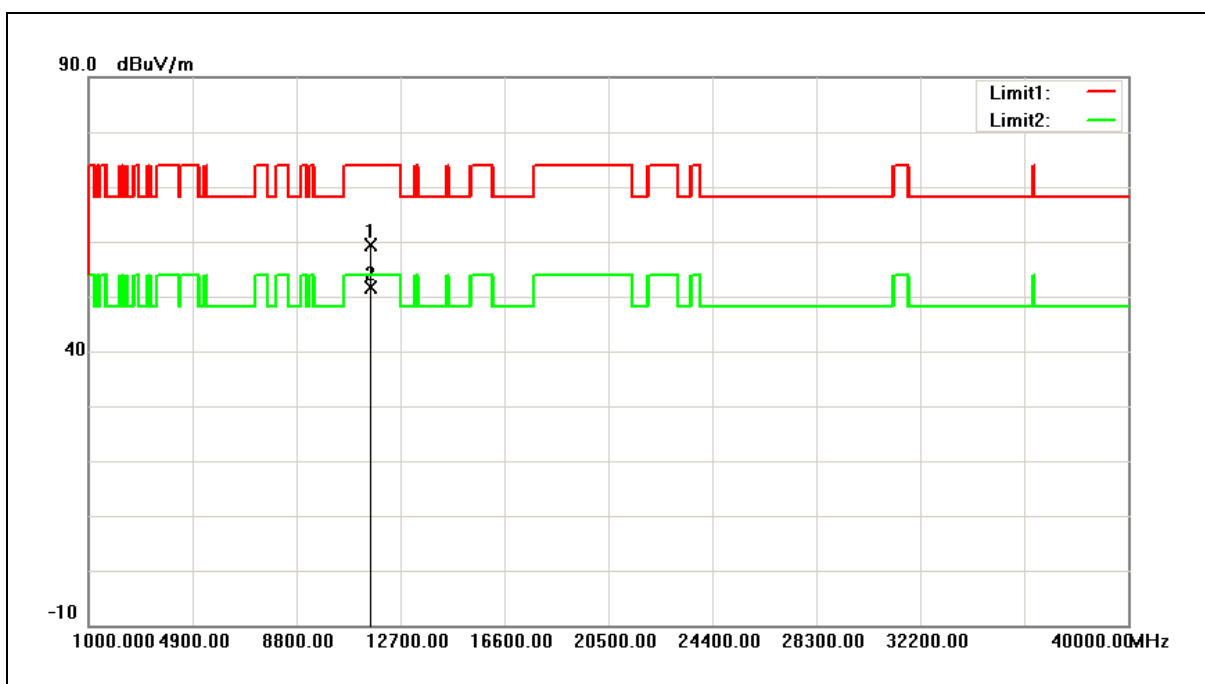
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11490.000	50.83	4.06	54.89	74.00	-19.11	peak
2	11490.000	43.66	4.06	47.72	54.00	-6.28	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5785MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



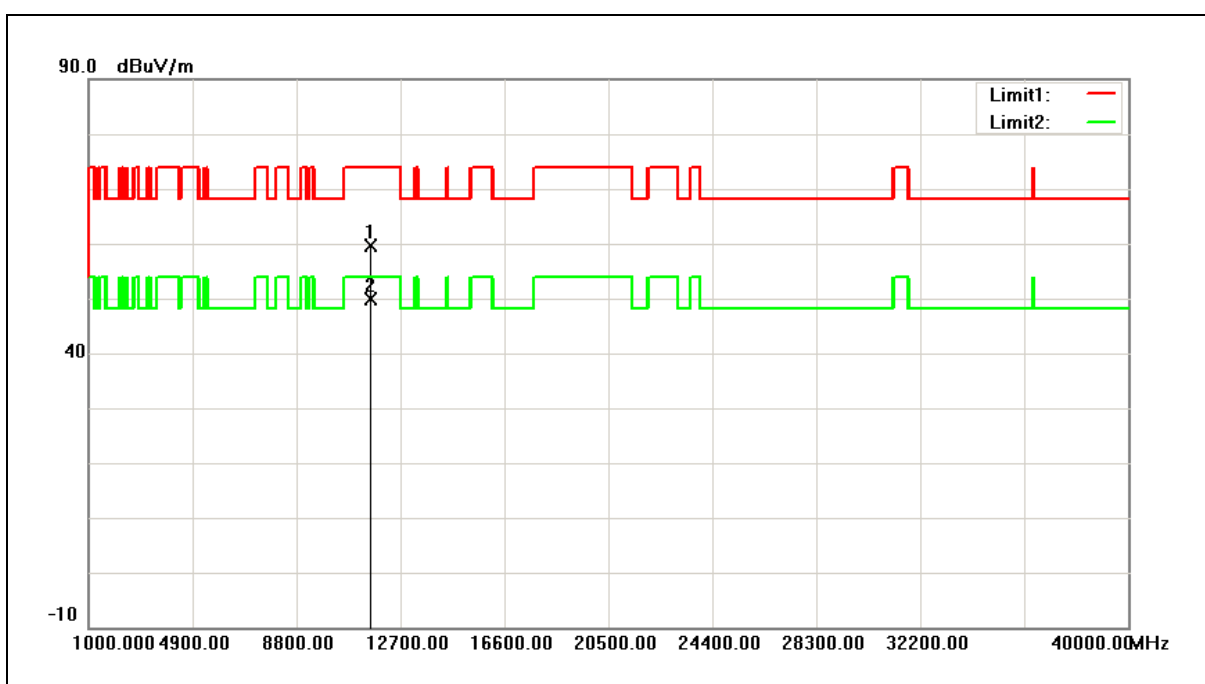
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	55.41	3.96	59.37	74.00	-14.63	peak
2	11570.000	47.63	3.96	51.59	54.00	-2.41	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5785MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		



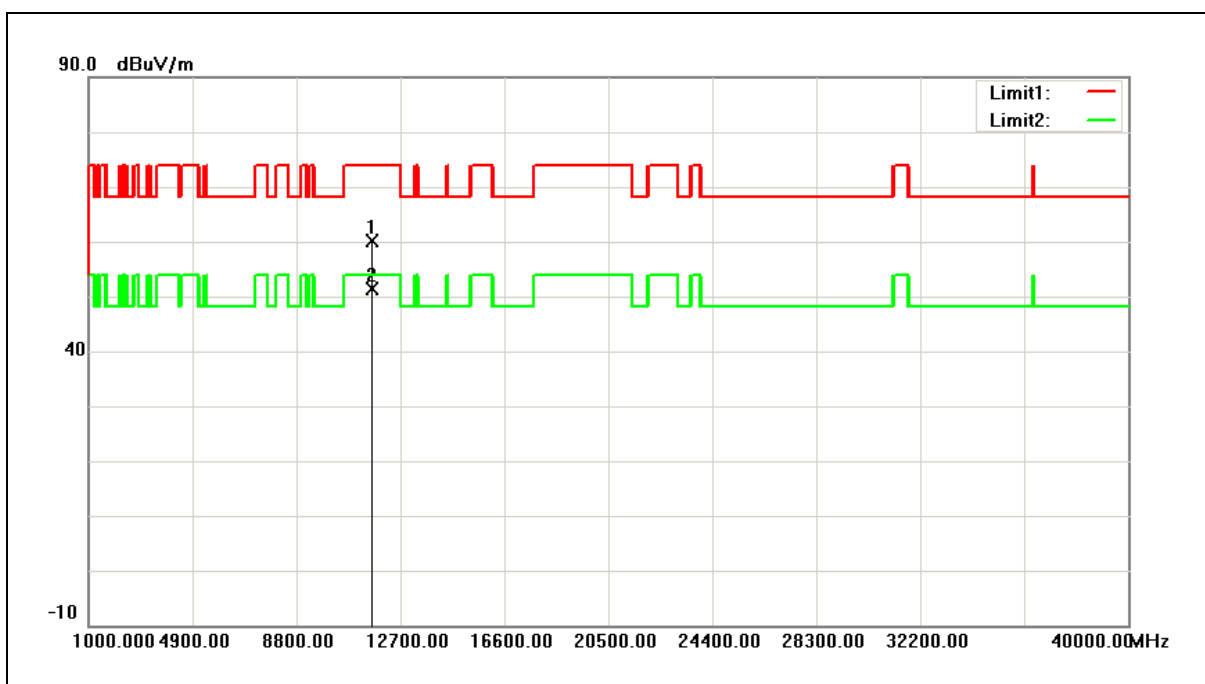
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11570.000	55.75	3.96	59.71	74.00	-14.29	peak
2	11570.000	46.00	3.96	49.96	54.00	-4.04	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5825MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



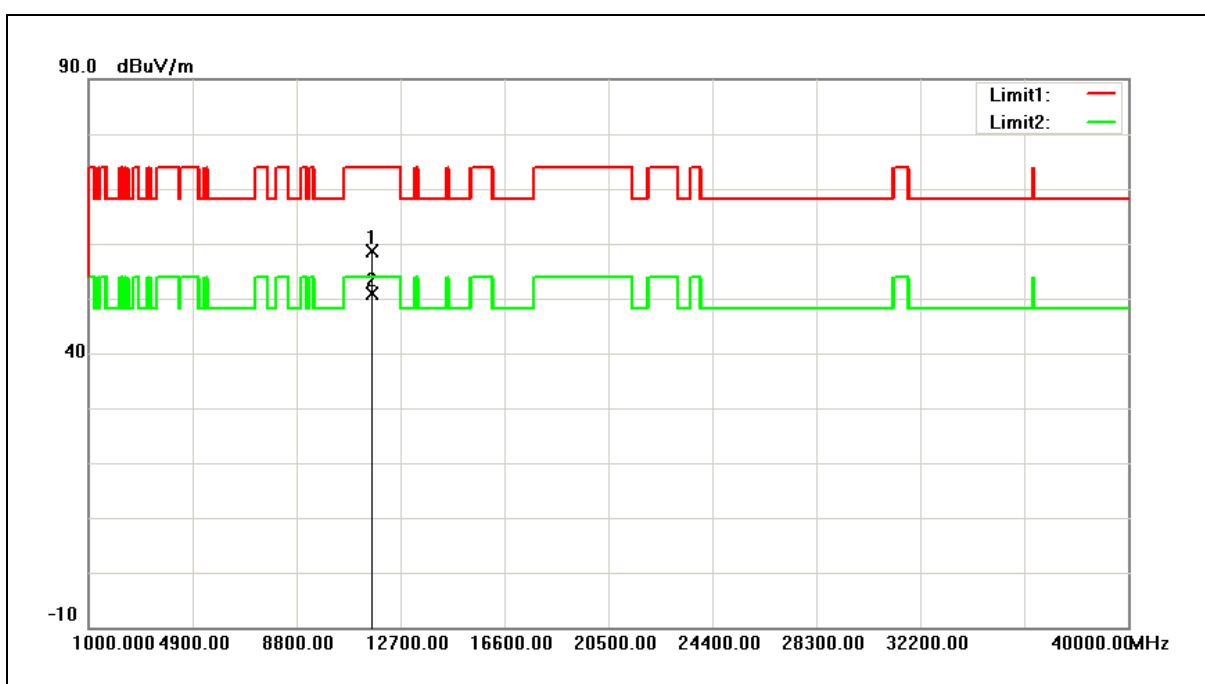
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	56.39	3.84	60.23	74.00	-13.77	peak
2	11650.000	47.55	3.84	51.39	54.00	-2.61	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5825MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11650.000	54.90	3.84	58.74	74.00	-15.26	peak
2	11650.000	47.05	3.84	50.89	54.00	-3.11	AVG

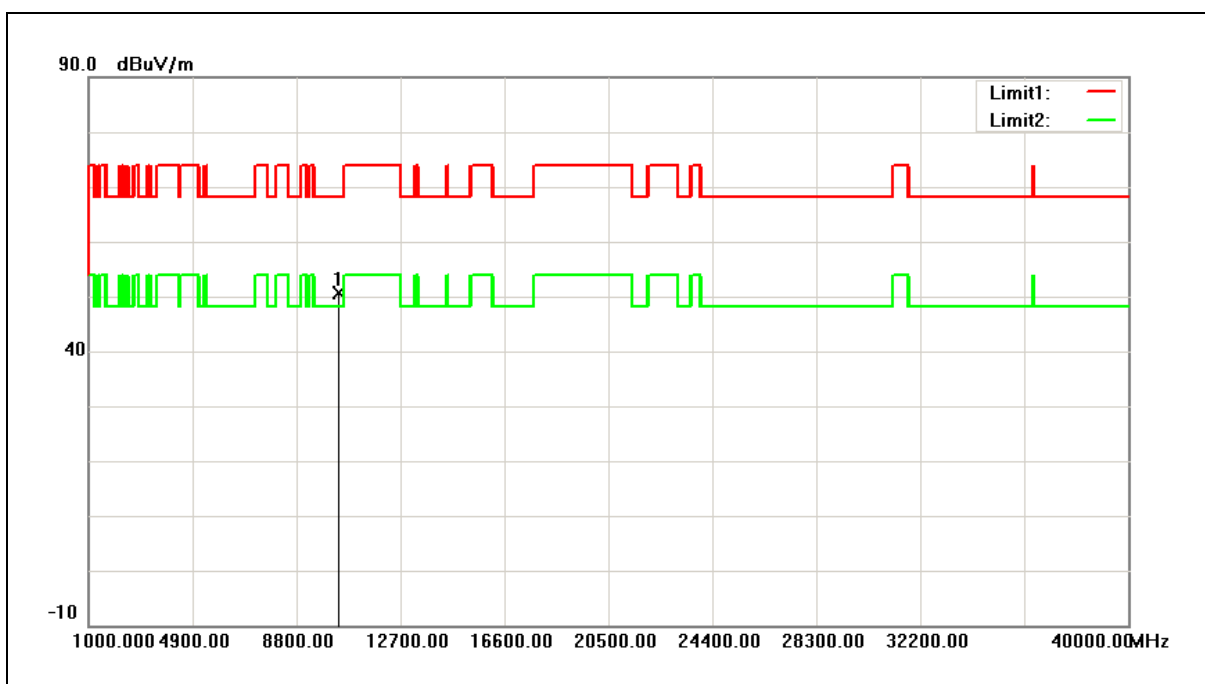
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5190MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	47.60	2.97	50.57	68.20	-17.63	peak

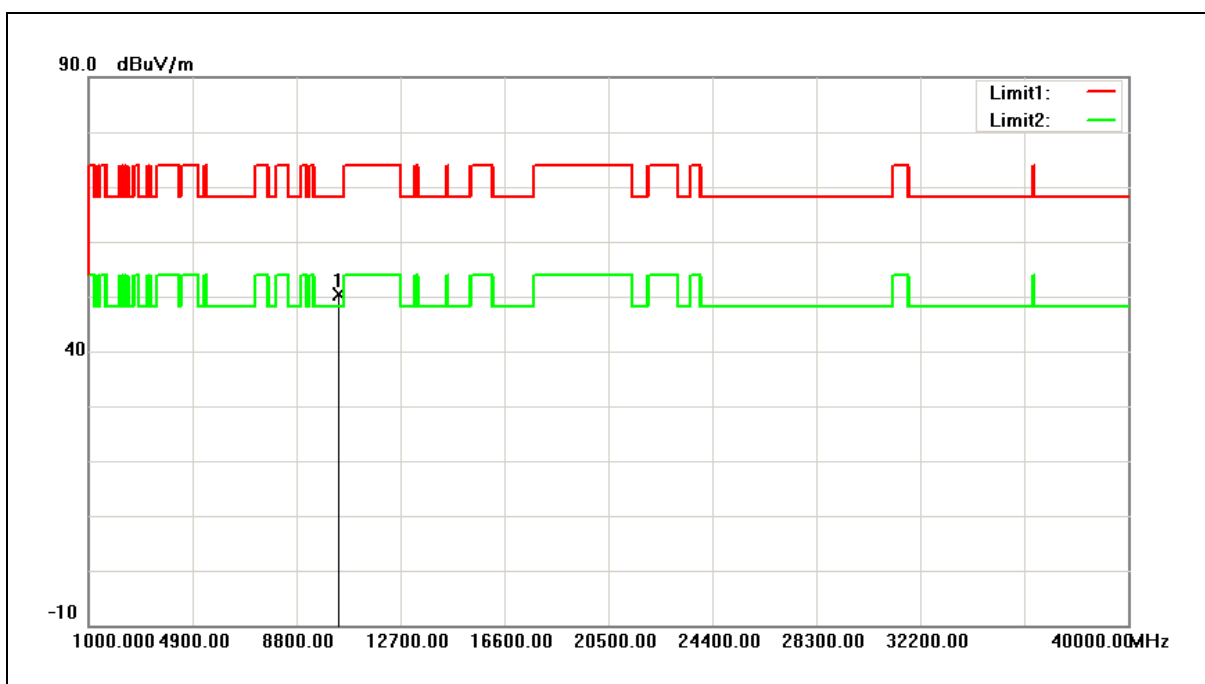
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5190MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10380.000	47.43	2.97	50.40	68.20	-17.80	peak

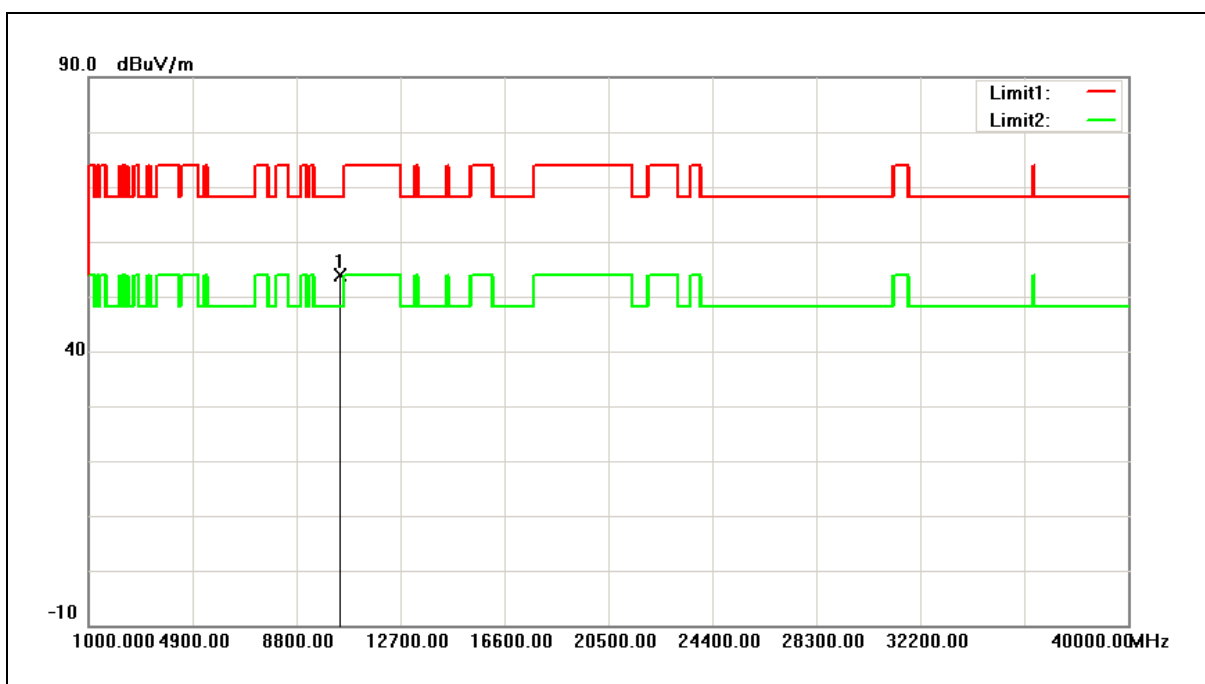
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Horizontal		



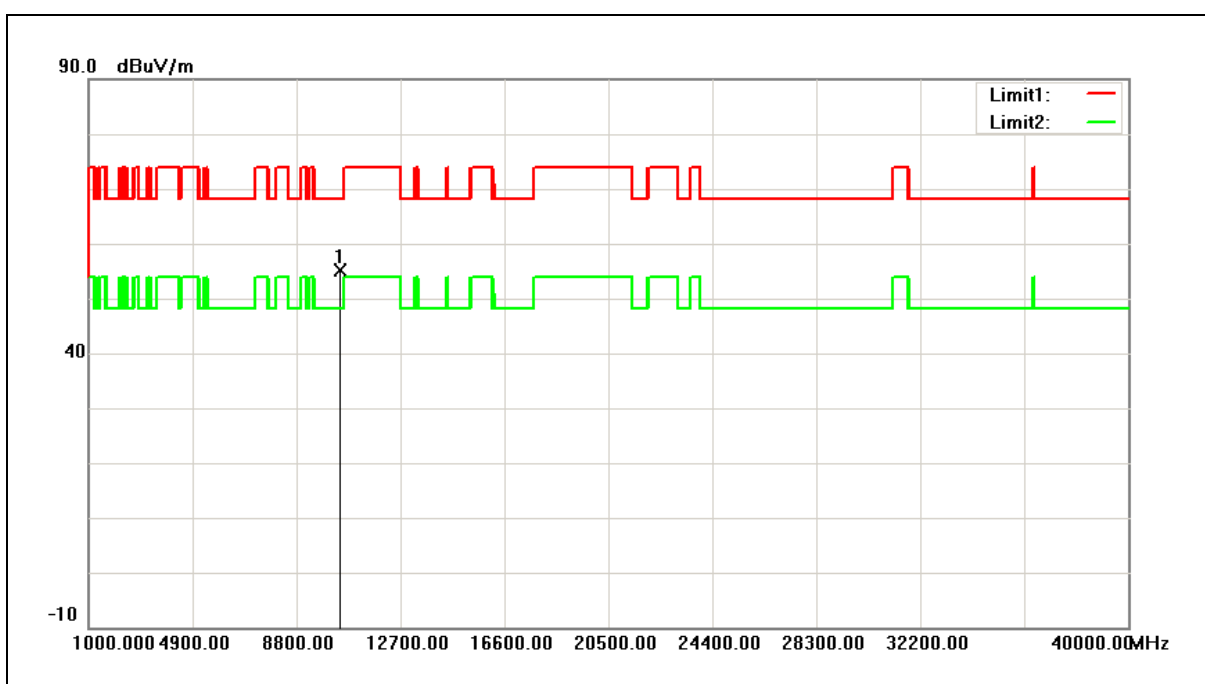
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	50.64	3.15	53.79	68.20	-14.41	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		



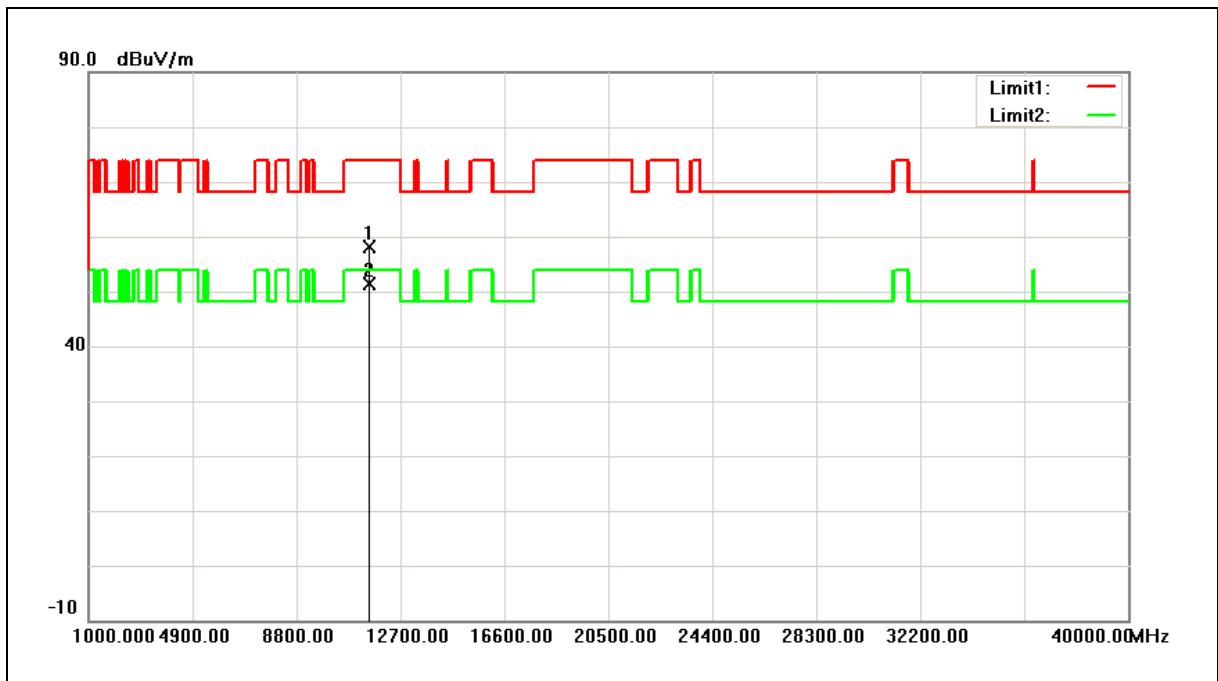
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10460.000	52.01	3.15	55.16	68.20	-13.04	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Horizontal		



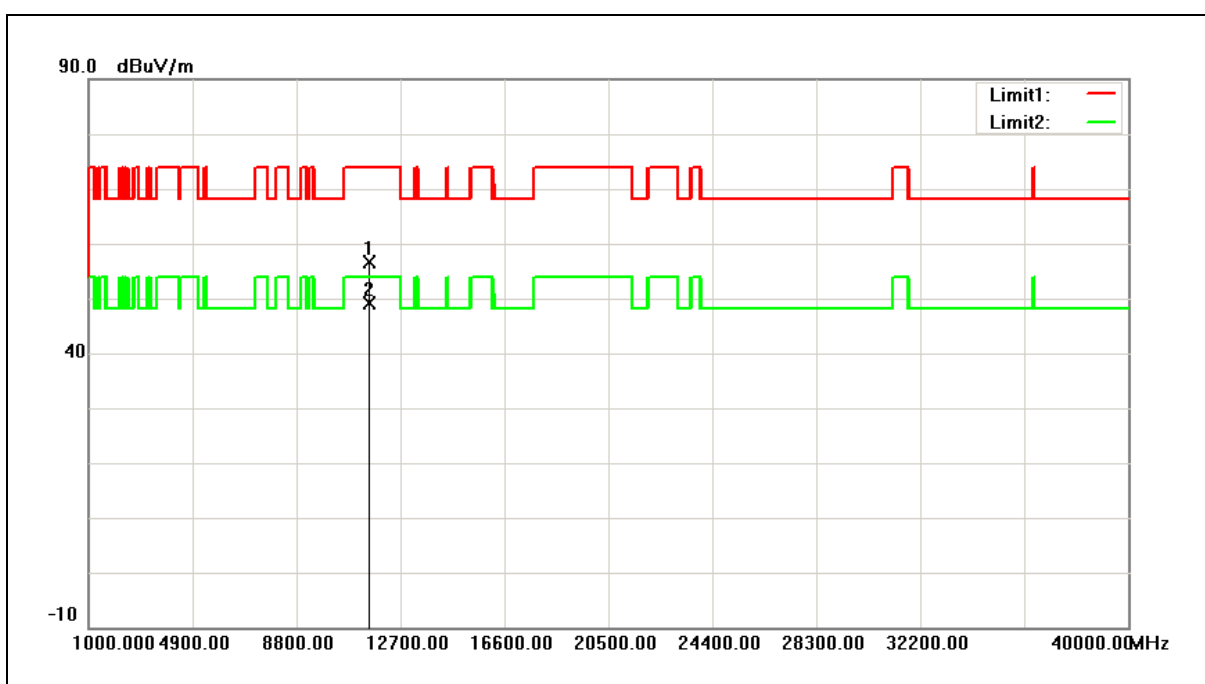
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	53.97	4.05	58.02	74.00	-15.98	peak
2	11510.000	47.38	4.05	51.43	54.00	-2.57	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		



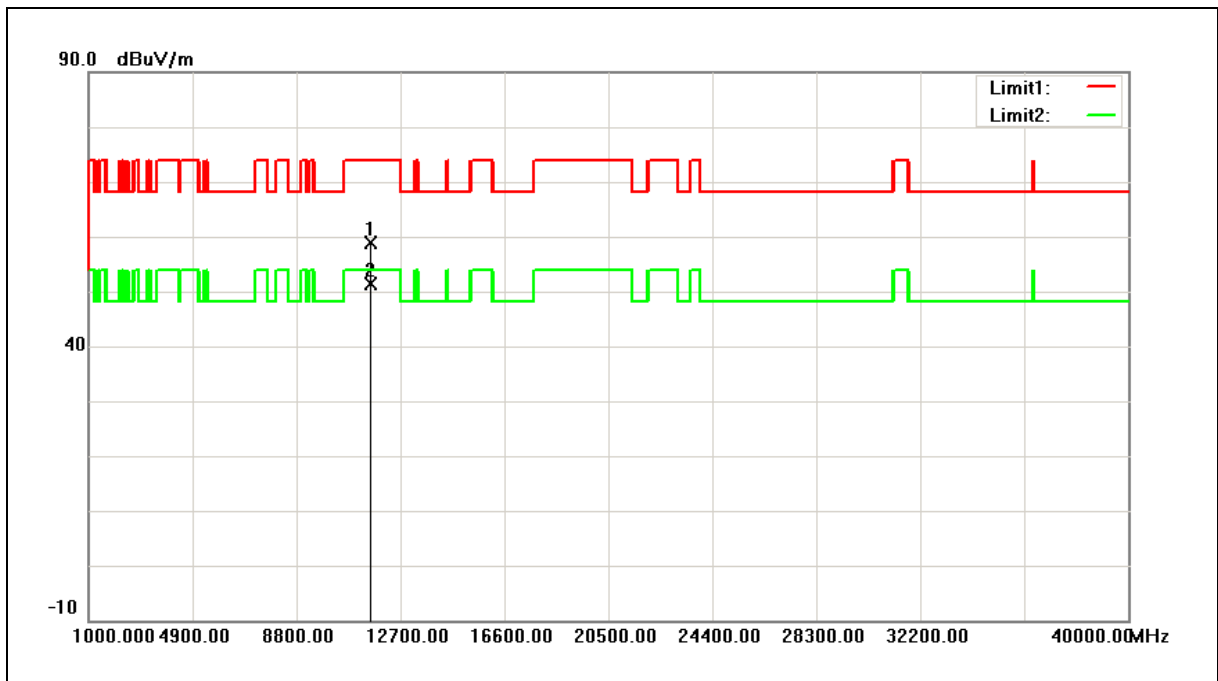
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11510.000	52.68	4.05	56.73	74.00	-17.27	peak
2	11510.000	44.96	4.05	49.01	54.00	-4.99	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5795MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Horizontal		



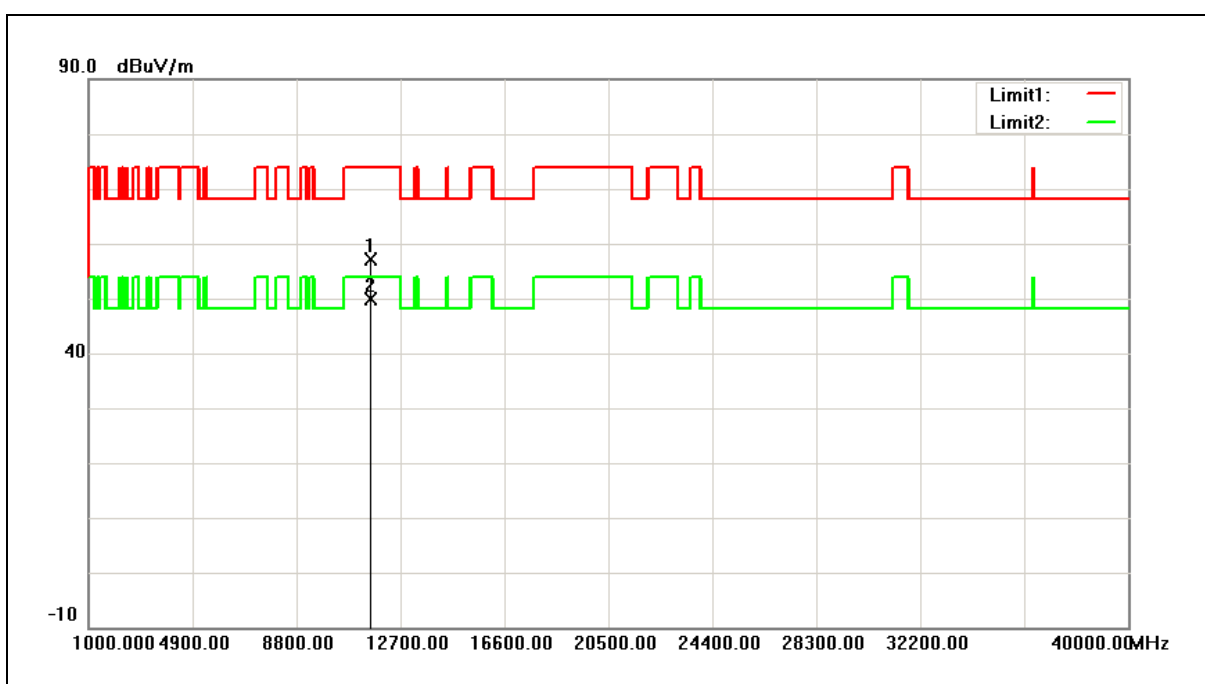
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	54.88	3.93	58.81	74.00	-15.19	peak
2	11590.000	47.40	3.93	51.33	54.00	-2.67	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5795MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11590.000	53.17	3.93	57.10	74.00	-16.90	peak
2	11590.000	46.04	3.93	49.97	54.00	-4.03	AVG

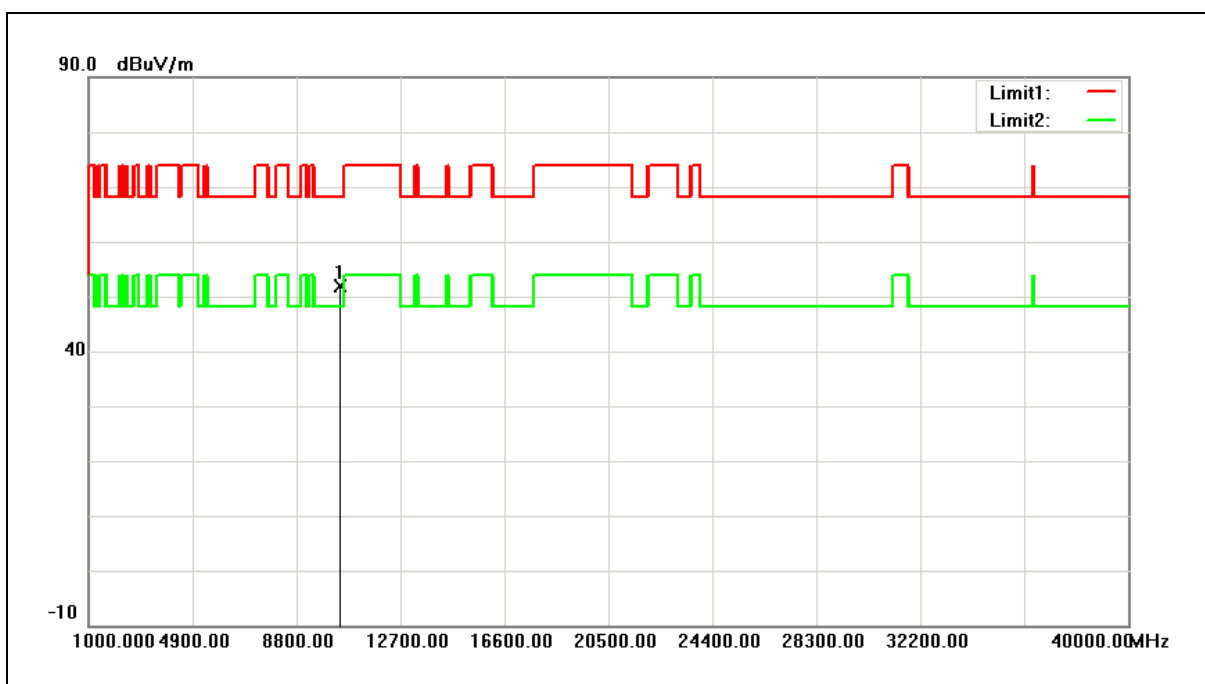
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	48.78	3.06	51.84	68.20	-16.36	peak

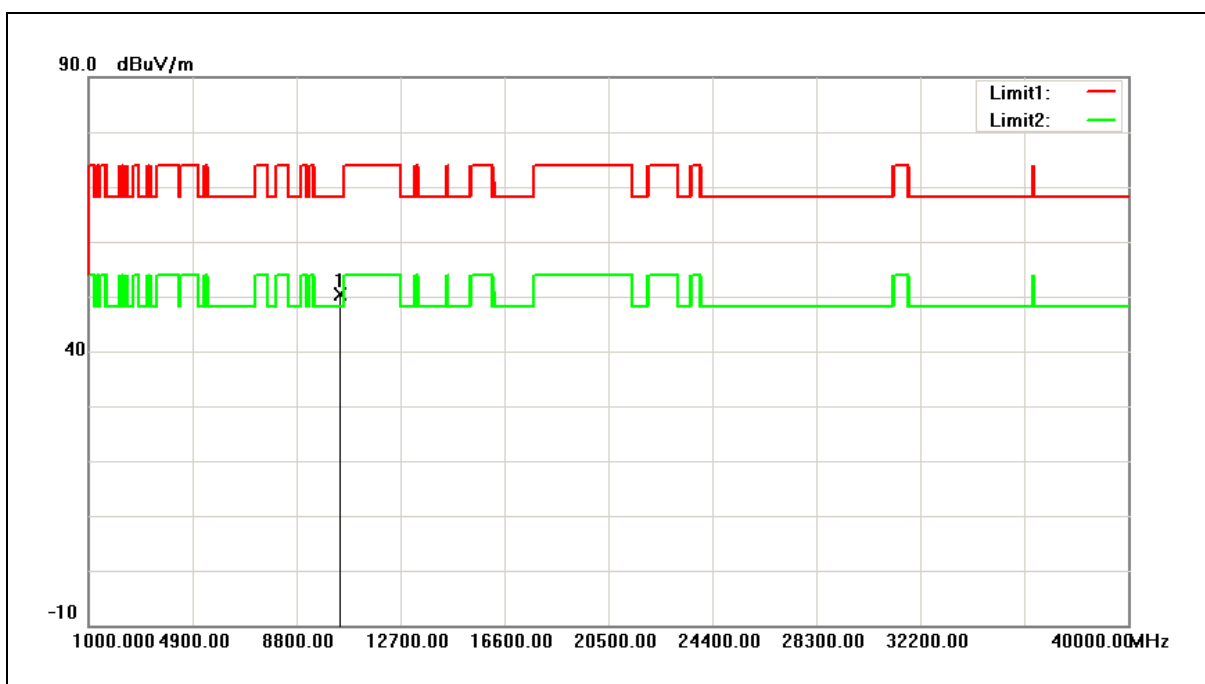
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Vertical		



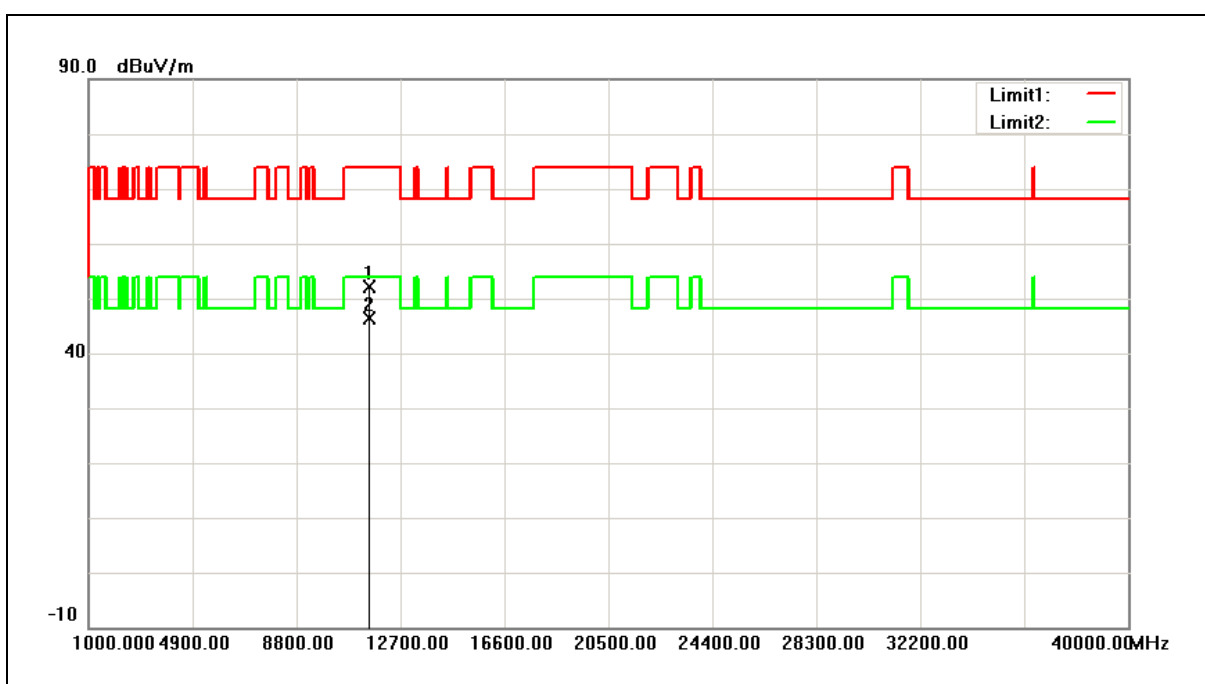
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10420.000	47.21	3.06	50.27	68.20	-17.93	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.000	48.23	3.99	52.22	74.00	-21.78	peak
2	11550.000	42.28	3.99	46.27	54.00	-7.73	AVG

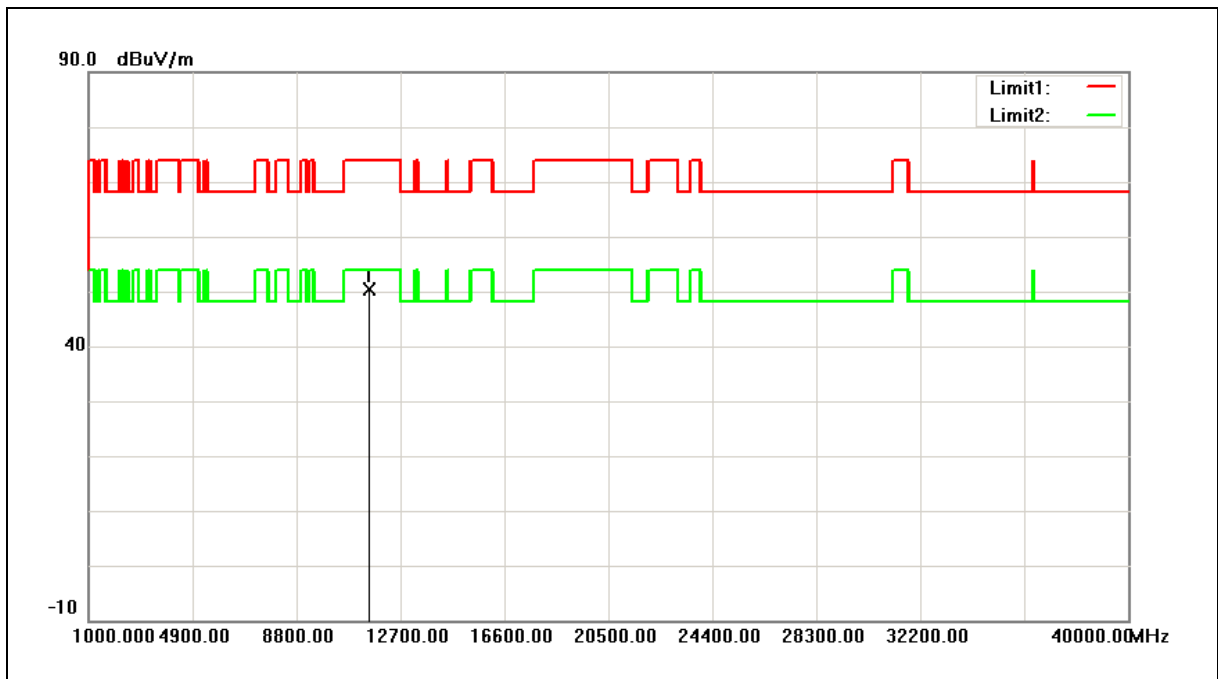
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Harmonic	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	11550.000	46.30	3.99	50.29	74.00	-23.71	peak

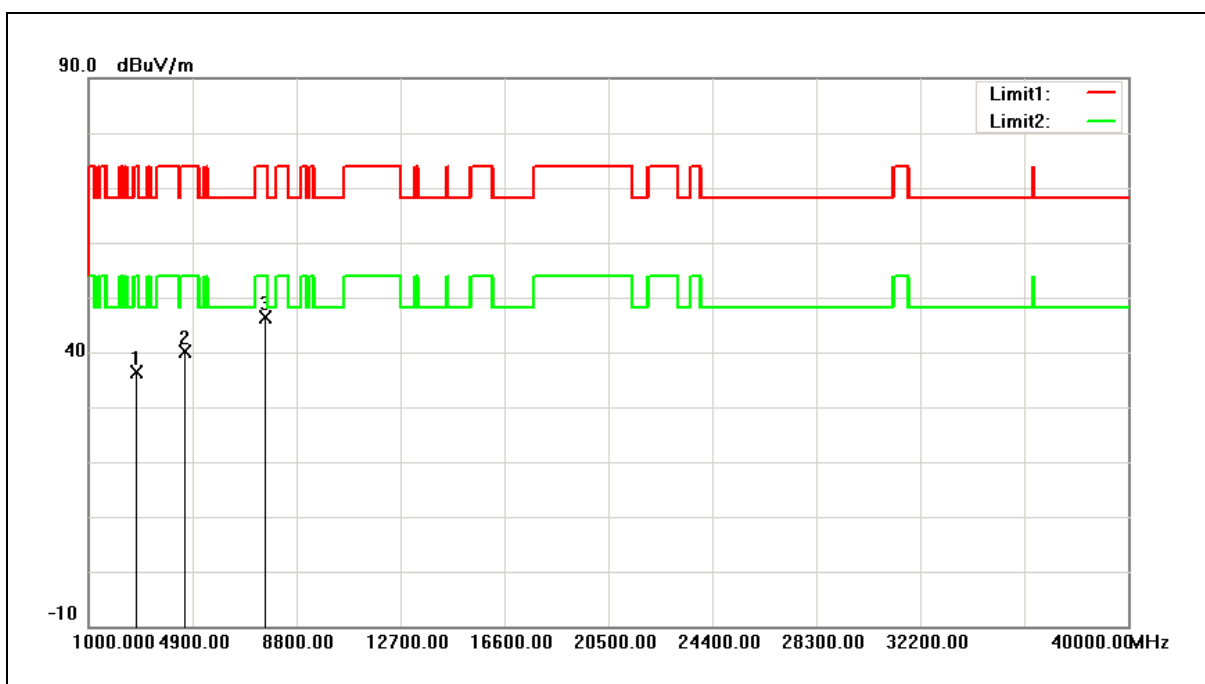
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Transmitter Unwanted Emissions	Power:	AC 120V/60Hz
Test Mode:	Simultaneous Transmitting	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
	(DTS+NII)	Date:	08/31/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2785.000	50.76	-14.28	36.48	74.00	-37.52	peak
2	4621.000	50.28	-10.18	40.10	74.00	-33.90	peak
3	7647.000	47.95	-1.45	46.50	74.00	-27.50	peak

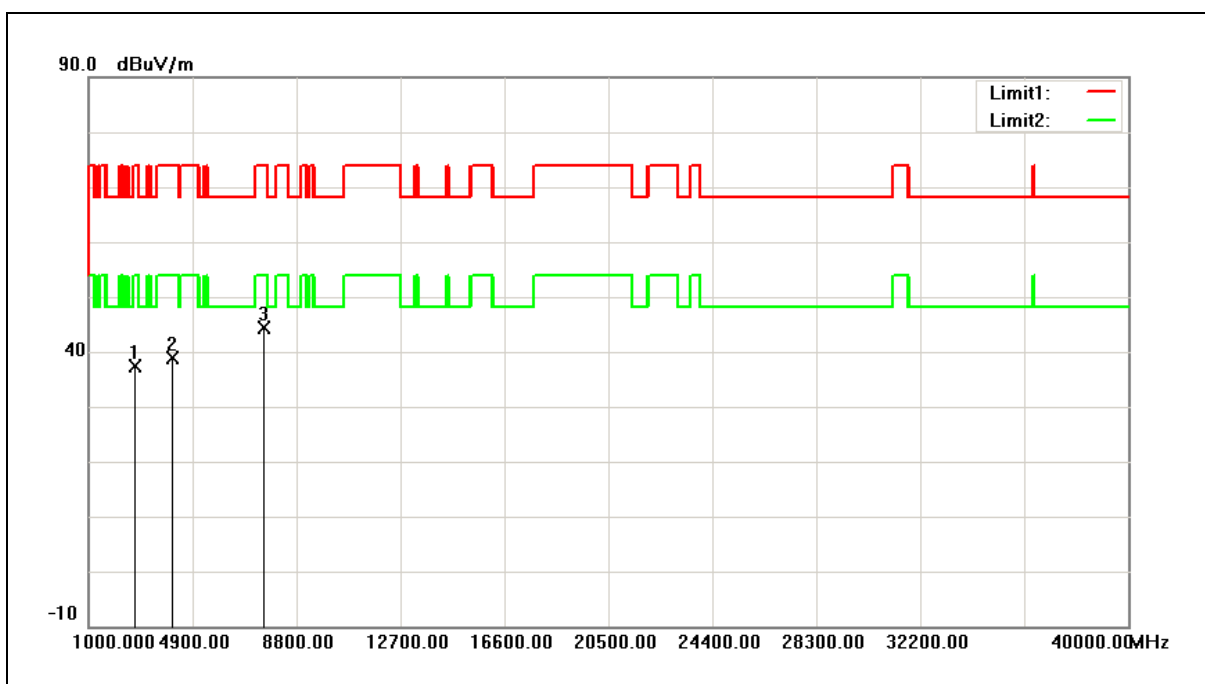
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Transmitter Unwanted Emissions	Power:	AC 120V/60Hz
Test Mode:	Simultaneous Transmitting	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
	(DTS+NII)	Date:	08/31/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2751.000	51.63	-14.37	37.26	74.00	-36.74	peak
2	4145.000	50.33	-11.35	38.98	74.00	-35.02	peak
3	7545.000	45.92	-1.66	44.26	74.00	-29.74	peak

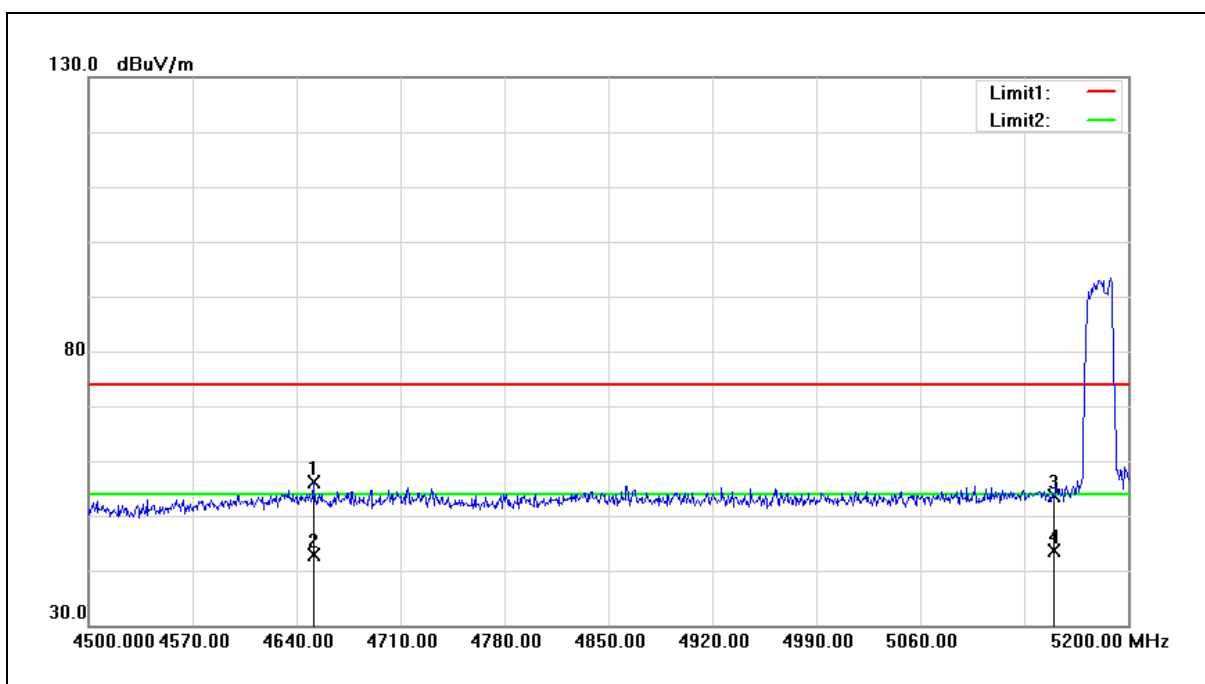
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Band Edge

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5180MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4651.200	51.67	4.42	56.09	74.00	-17.91	peak
2	4651.200	38.46	4.42	42.88	54.00	-11.12	AVG
3	5150.000	47.88	5.75	53.63	74.00	-20.37	peak
4	5150.000	37.84	5.75	43.59	54.00	-10.41	AVG

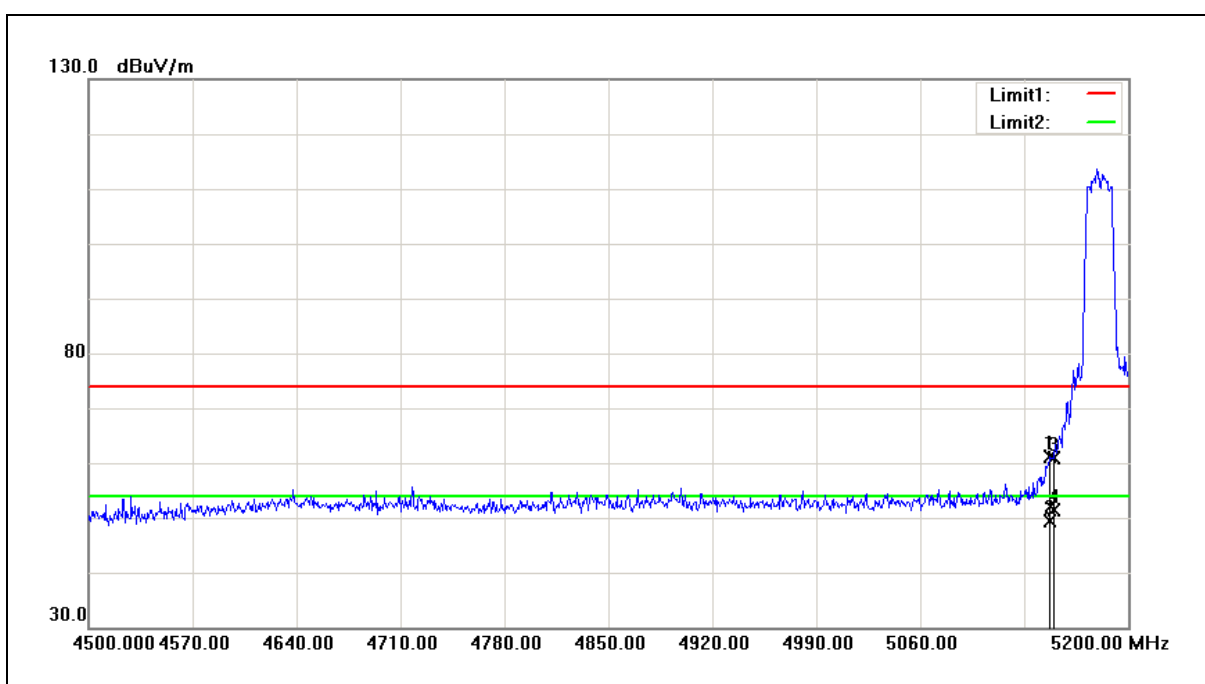
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5180MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5147.500	55.40	5.74	61.14	74.00	-12.86	peak
2	5147.500	43.55	5.74	49.29	54.00	-4.71	AVG
3	5150.000	55.14	5.75	60.89	74.00	-13.11	peak
4	5150.000	45.75	5.75	51.50	54.00	-2.50	AVG

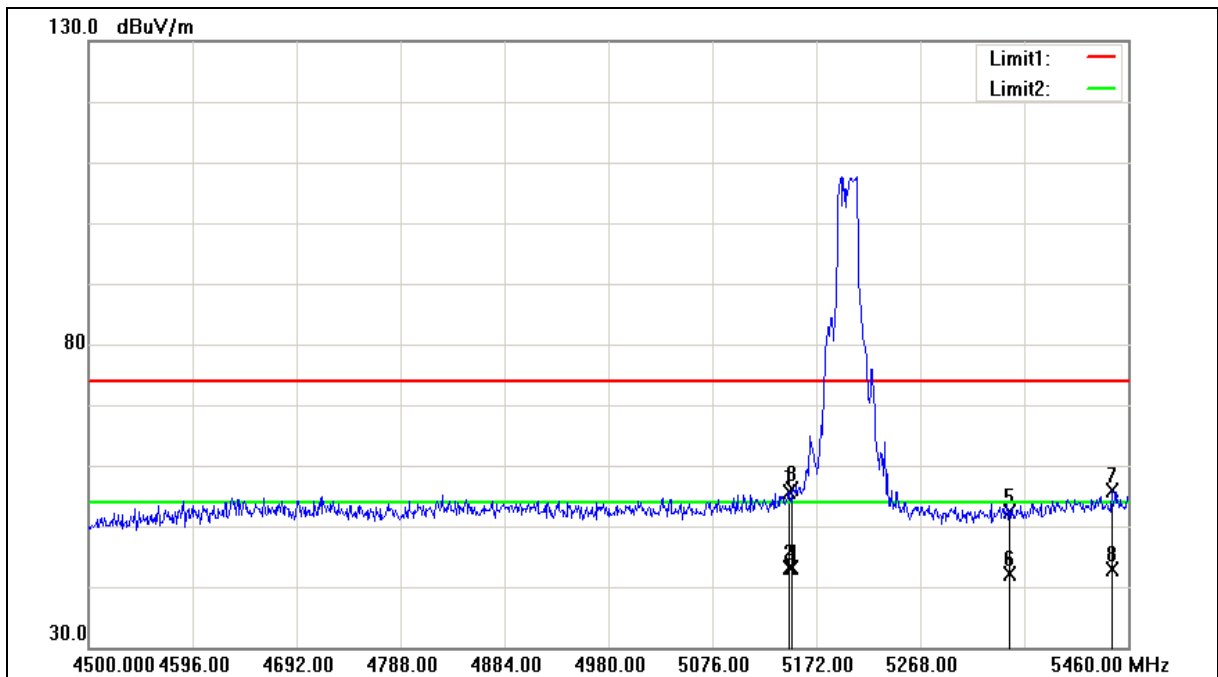
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5200MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5200MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5147.040	49.89	5.74	55.63	74.00	-18.37	peak
2	5147.040	37.31	5.74	43.05	54.00	-10.95	AVG
3	5150.000	50.48	5.75	56.23	74.00	-17.77	peak
4	5150.000	37.47	5.75	43.22	54.00	-10.78	AVG
5	5350.000	46.27	6.03	52.30	74.00	-21.70	peak
6	5350.000	36.10	6.03	42.13	54.00	-11.87	AVG
7	5444.640	49.70	6.18	55.88	74.00	-18.12	peak
8	5444.640	36.68	6.18	42.86	54.00	-11.14	AVG

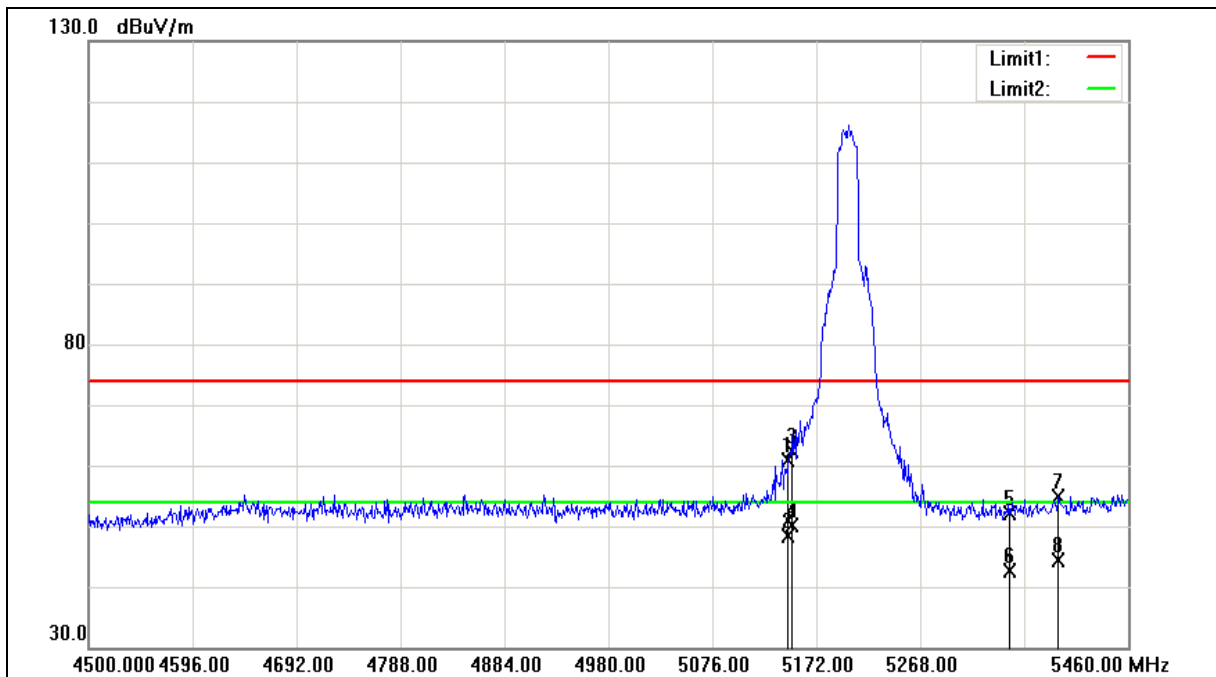
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5200MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5200MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5146.080	55.19	5.74	60.93	74.00	-13.07	peak
2	5146.080	42.72	5.74	48.46	54.00	-5.54	AVG
3	5150.000	56.69	5.75	62.44	74.00	-11.56	peak
4	5150.000	44.27	5.75	50.02	54.00	-3.98	AVG
5	5350.000	46.22	6.03	52.25	74.00	-21.75	peak
6	5350.000	36.58	6.03	42.61	54.00	-11.39	AVG
7	5395.680	48.83	6.11	54.94	74.00	-19.06	peak
8	5395.680	38.28	6.11	44.39	54.00	-9.61	AVG

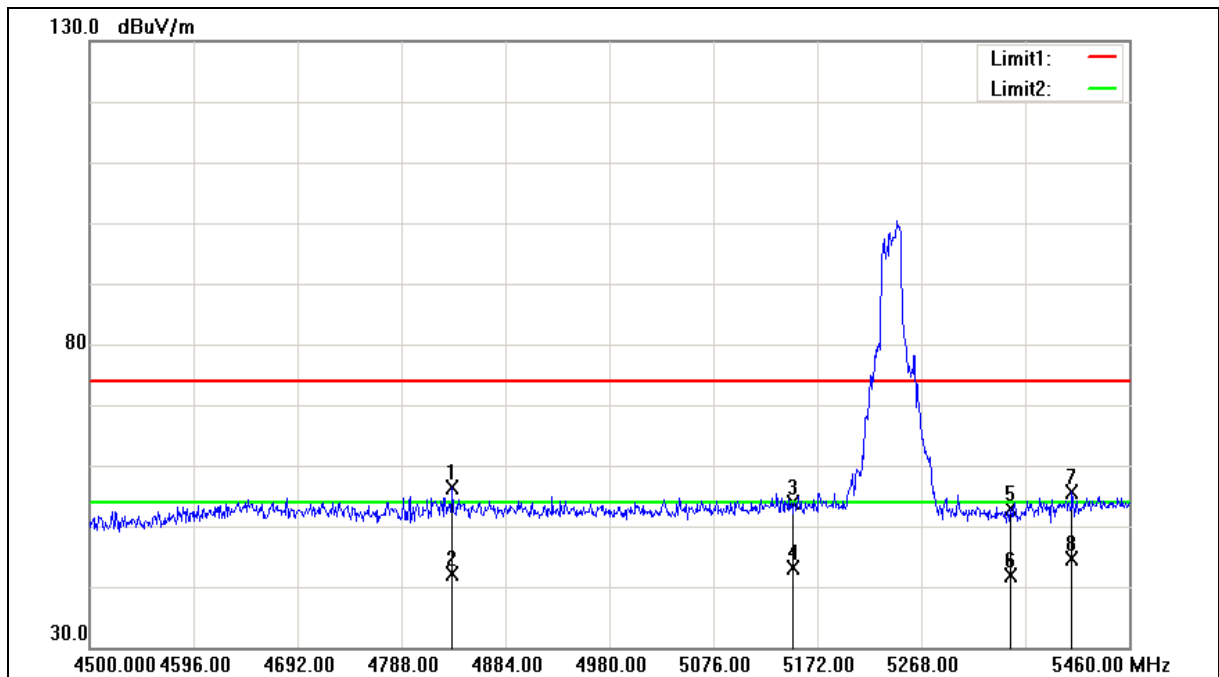
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5240MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5240MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4835.040	51.27	5.00	56.27	74.00	-17.73	peak
2	4835.040	37.19	5.00	42.19	54.00	-11.81	AVG
3	5150.000	48.17	5.75	53.92	74.00	-20.08	peak
4	5150.000	37.33	5.75	43.08	54.00	-10.92	AVG
5	5350.000	46.94	6.03	52.97	74.00	-21.03	peak
6	5350.000	35.91	6.03	41.94	54.00	-12.06	AVG
7	5407.200	49.63	6.12	55.75	74.00	-18.25	peak
8	5407.200	38.49	6.12	44.61	54.00	-9.39	AVG

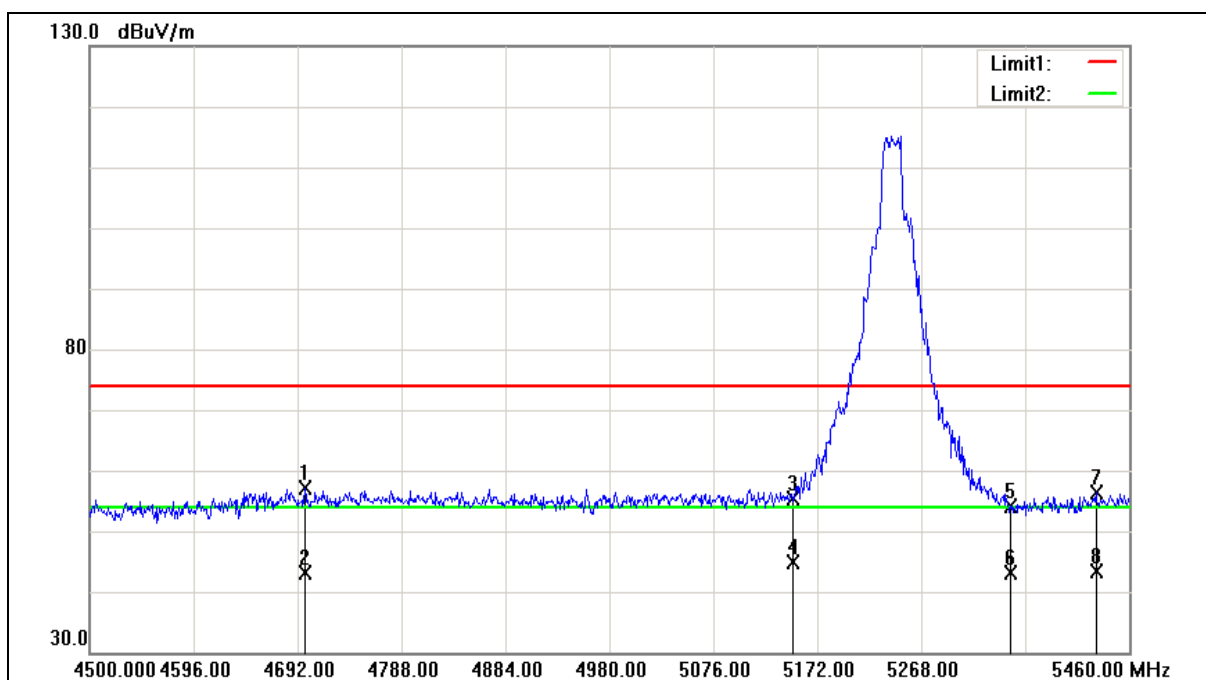
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5240MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5240MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		

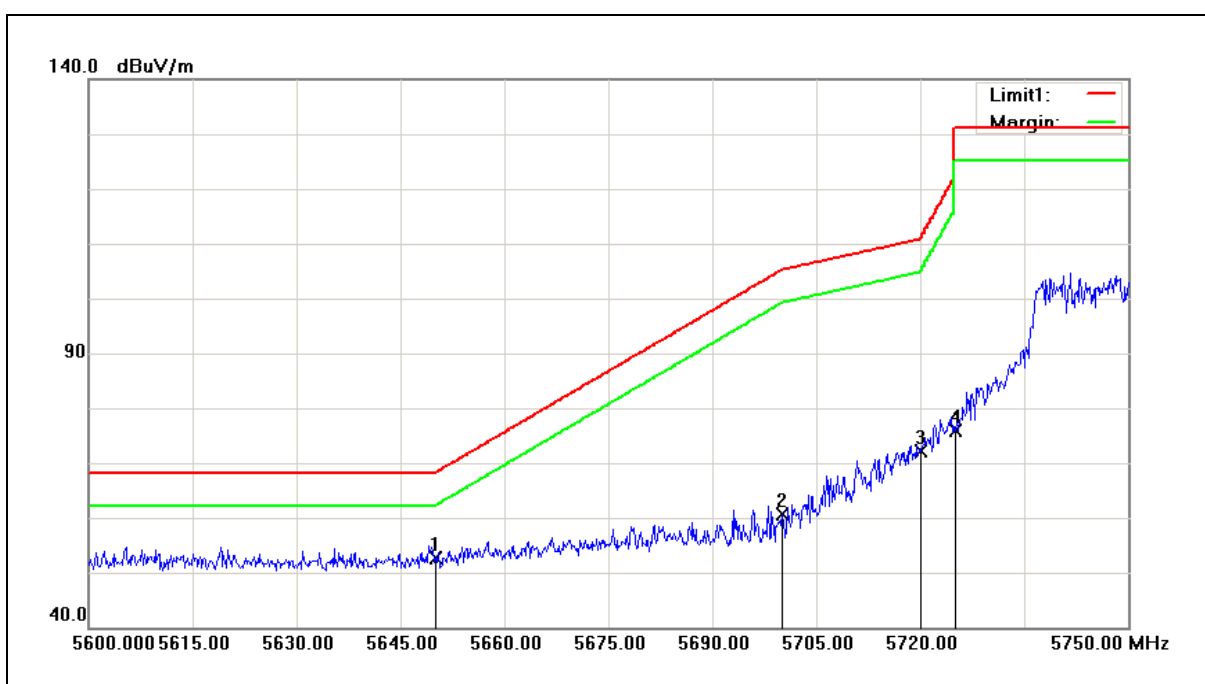
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4698.720	52.58	4.58	57.16	74.00	-16.84	peak
2	4698.720	38.64	4.58	43.22	54.00	-10.78	AVG
3	5150.000	49.58	5.75	55.33	74.00	-18.67	peak
4	5150.000	39.17	5.75	44.92	54.00	-9.08	AVG
5	5350.000	48.13	6.03	54.16	74.00	-19.84	peak
6	5350.000	37.12	6.03	43.15	54.00	-10.85	AVG
7	5429.280	50.20	6.16	56.36	74.00	-17.64	peak
8	5429.280	37.22	6.16	43.38	54.00	-10.62	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5745MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



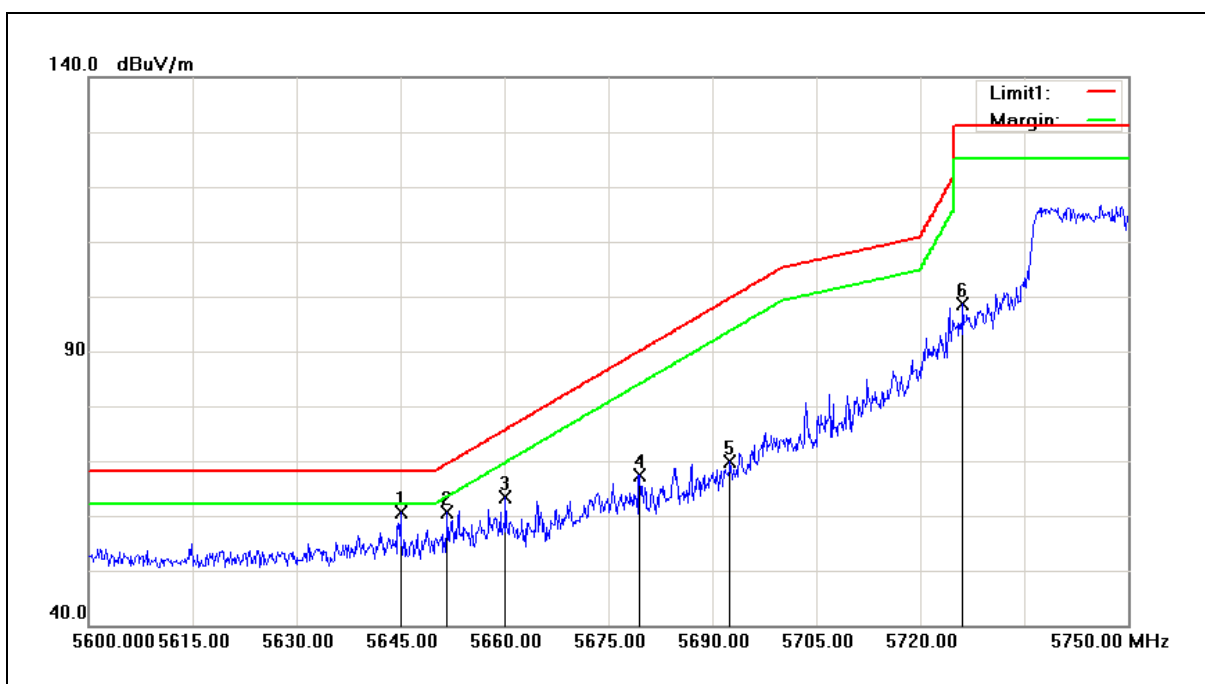
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	46.00	6.58	52.58	68.20	-15.62	peak
2	5700.000	53.87	6.68	60.55	105.20	-44.65	peak
3	5720.000	65.40	6.73	72.13	110.80	-38.67	peak
4	5725.000	69.04	6.74	75.78	122.20	-46.42	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5745MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/01/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5645.000	53.98	6.57	60.55	68.20	-7.65	peak
2	5651.750	54.00	6.58	60.58	69.50	-8.92	peak
3	5660.150	56.69	6.60	63.29	75.71	-12.42	peak
4	5679.500	60.76	6.64	67.40	90.03	-22.63	peak
5	5692.550	63.12	6.67	69.79	99.69	-29.90	peak
6	5726.150	91.89	6.74	98.63	131.20	-32.57	peak

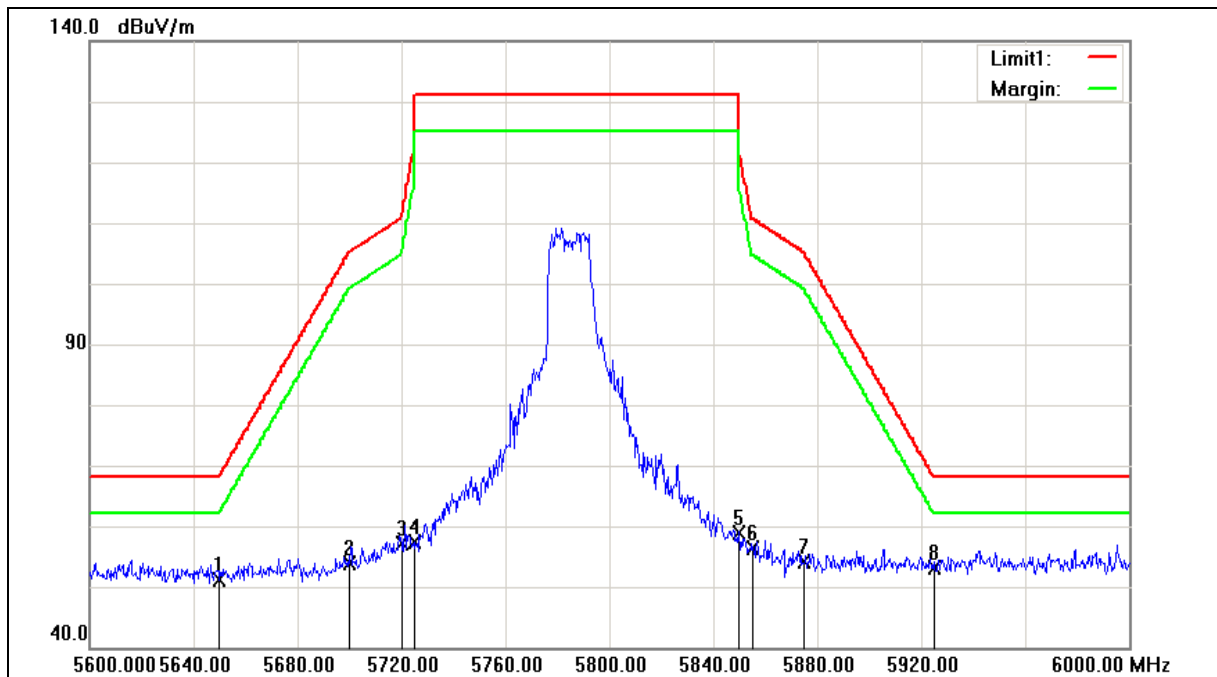
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5785MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5785MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	44.63	6.58	51.21	68.20	-16.99	peak
2	5700.000	47.17	6.68	53.85	105.20	-51.35	peak
3	5720.000	50.46	6.73	57.19	110.80	-53.61	peak
4	5725.000	50.58	6.74	57.32	122.20	-64.88	peak
5	5850.000	52.01	6.99	59.00	122.20	-63.20	peak
6	5855.000	49.26	7.00	56.26	110.80	-54.54	peak
7	5875.000	47.18	7.05	54.23	105.20	-50.97	peak
8	5925.000	45.86	7.16	53.02	68.20	-15.18	peak

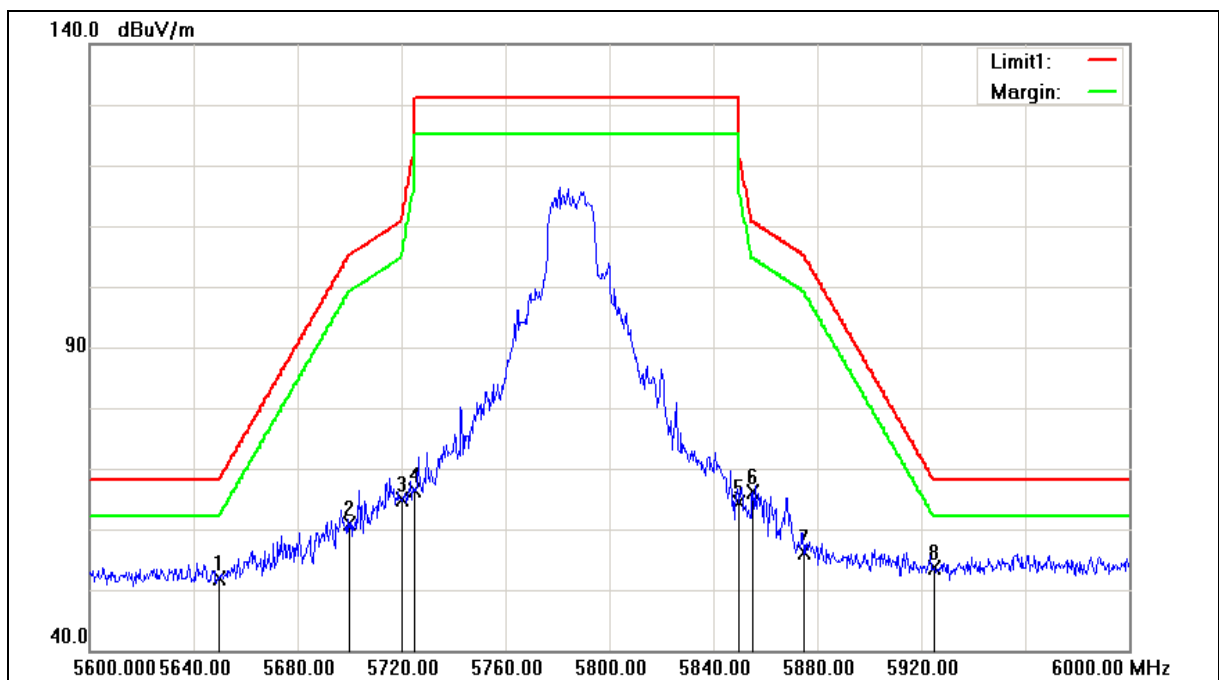
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5785MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5785MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		

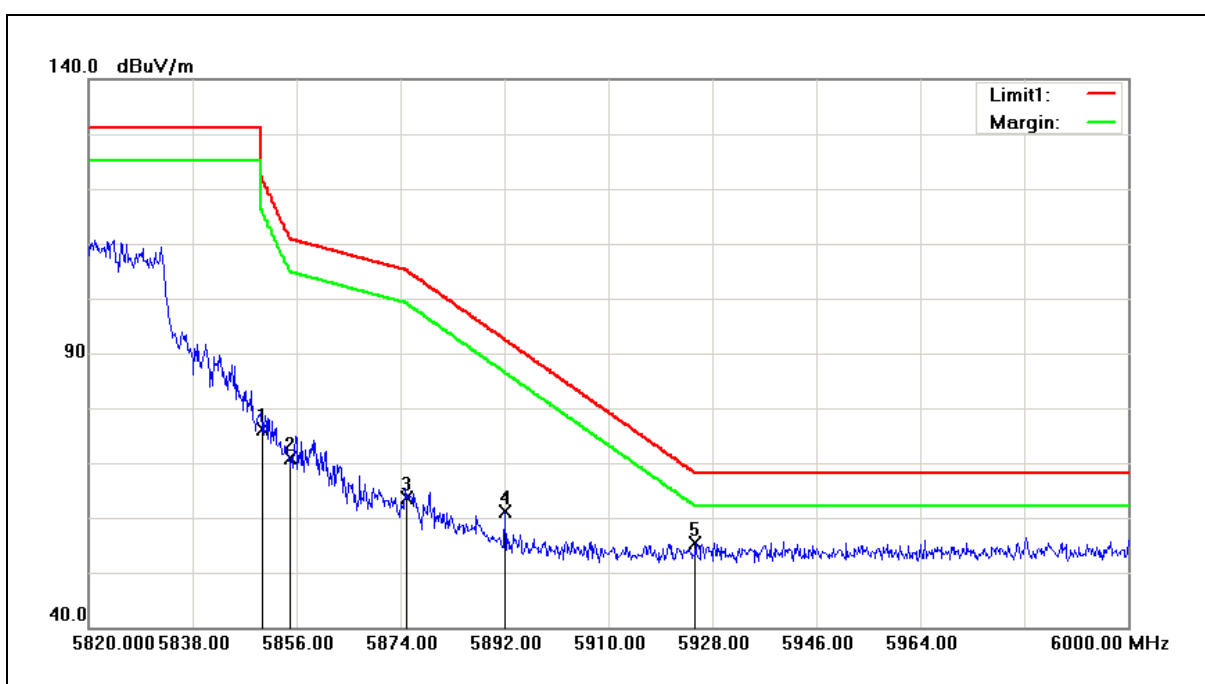
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	45.33	6.58	51.91	68.20	-16.29	peak
2	5700.000	54.27	6.68	60.95	105.20	-44.25	peak
3	5720.000	58.04	6.73	64.77	110.80	-46.03	peak
4	5725.000	59.63	6.74	66.37	122.20	-55.83	peak
5	5850.000	57.43	6.99	64.42	122.20	-57.78	peak
6	5855.000	59.04	7.00	66.04	110.80	-44.76	peak
7	5875.000	49.00	7.05	56.05	105.20	-49.15	peak
8	5925.000	46.47	7.16	53.63	68.20	-14.57	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5825MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	69.09	6.99	76.08	122.20	-46.12	peak
2	5855.000	63.85	7.00	70.85	110.80	-39.95	peak
3	5875.000	56.61	7.05	63.66	105.20	-41.54	peak
4	5892.000	54.06	7.09	61.15	92.62	-31.47	peak
5	5925.000	48.11	7.16	55.27	68.20	-12.93	peak

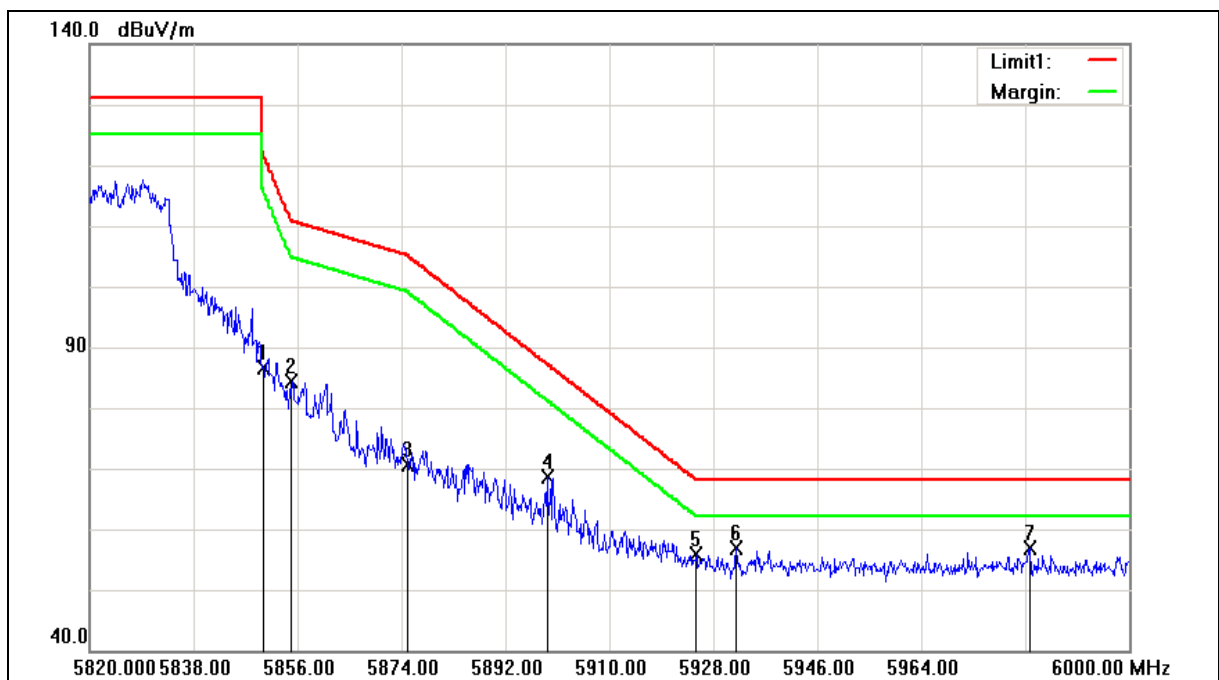
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5825MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5825MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	09/02/2017
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	79.57	6.99	86.56	122.20	-35.64	peak
2	5855.000	77.31	7.00	84.31	110.80	-26.49	peak
3	5875.000	63.49	7.05	70.54	105.20	-34.66	peak
4	5899.200	61.50	7.10	68.60	87.29	-18.69	peak
5	5925.000	48.71	7.16	55.87	68.20	-12.33	peak
6	5931.960	49.78	7.17	56.95	68.20	-11.25	peak
7	5982.900	49.61	7.28	56.89	68.20	-11.31	peak

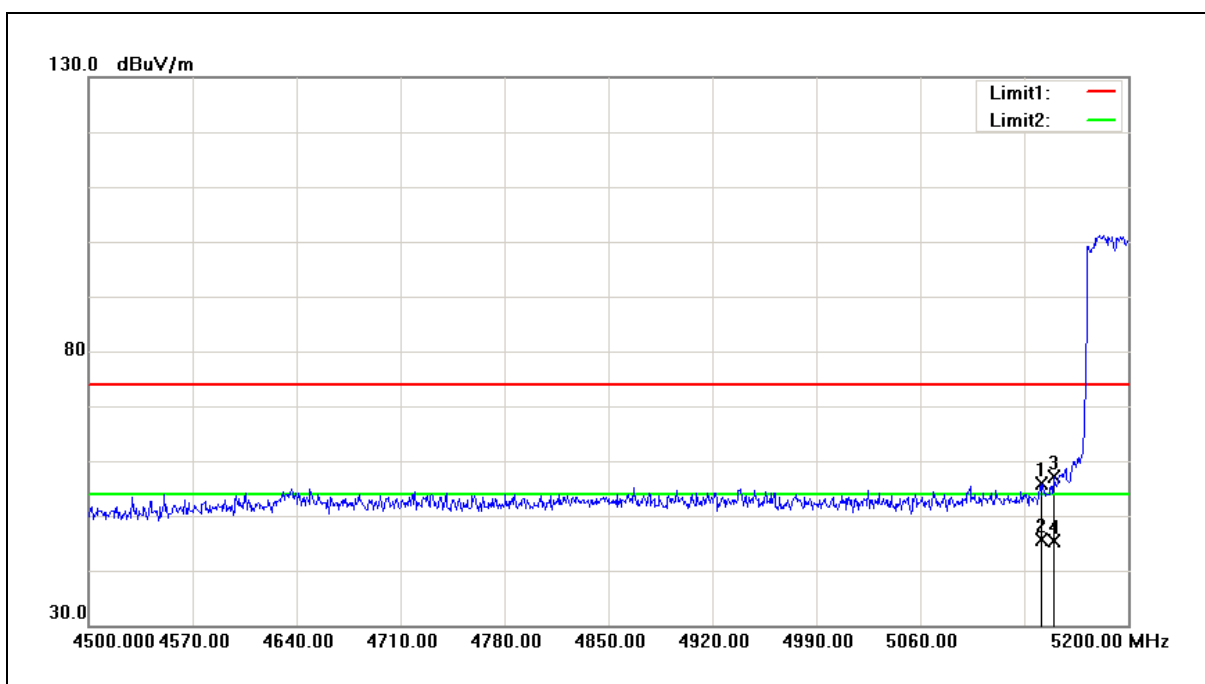
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5190MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/01/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5141.900	50.03	5.74	55.77	74.00	-18.23	peak
2	5141.900	39.92	5.74	45.66	54.00	-8.34	AVG
3	5150.000	51.35	5.75	57.10	74.00	-16.90	peak
4	5150.000	39.71	5.75	45.46	54.00	-8.54	AVG

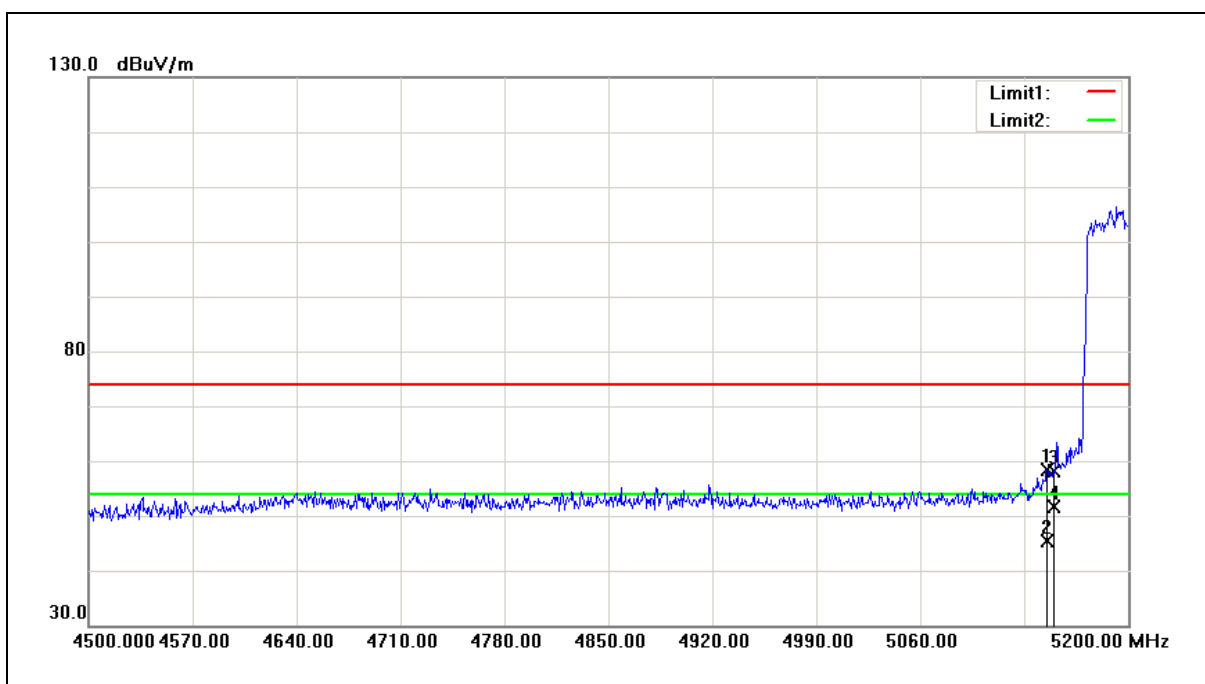
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5190MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/01/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5145.400	52.54	5.74	58.28	74.00	-15.72	peak
2	5145.400	39.65	5.74	45.39	54.00	-8.61	AVG
3	5150.000	52.41	5.75	58.16	74.00	-15.84	peak
4	5150.000	45.98	5.75	51.73	54.00	-2.27	AVG

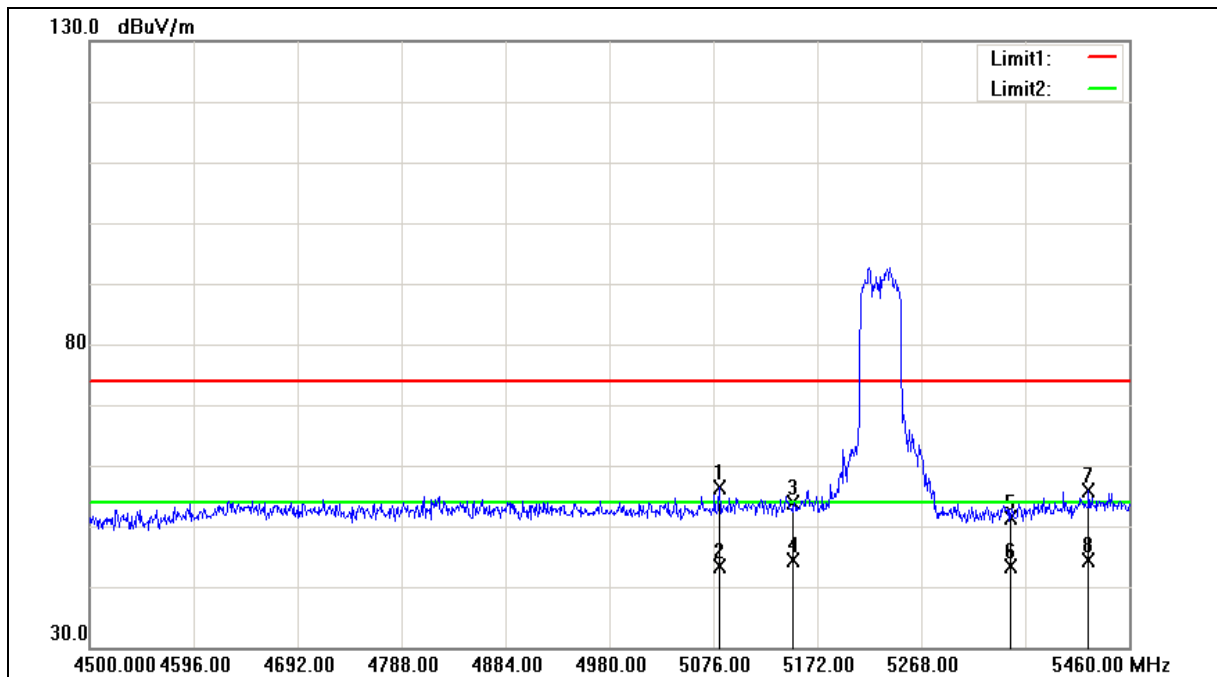
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/01/2017
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/01/2017
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5081.760	50.64	5.64	56.28	74.00	-17.72	peak
2	5081.760	37.63	5.64	43.27	54.00	-10.73	AVG
3	5150.000	48.02	5.75	53.77	74.00	-20.23	peak
4	5150.000	38.60	5.75	44.35	54.00	-9.65	AVG
5	5350.000	45.46	6.03	51.49	74.00	-22.51	peak
6	5350.000	37.25	6.03	43.28	54.00	-10.72	AVG
7	5422.560	49.65	6.14	55.79	74.00	-18.21	peak
8	5422.560	38.24	6.14	44.38	54.00	-9.62	AVG

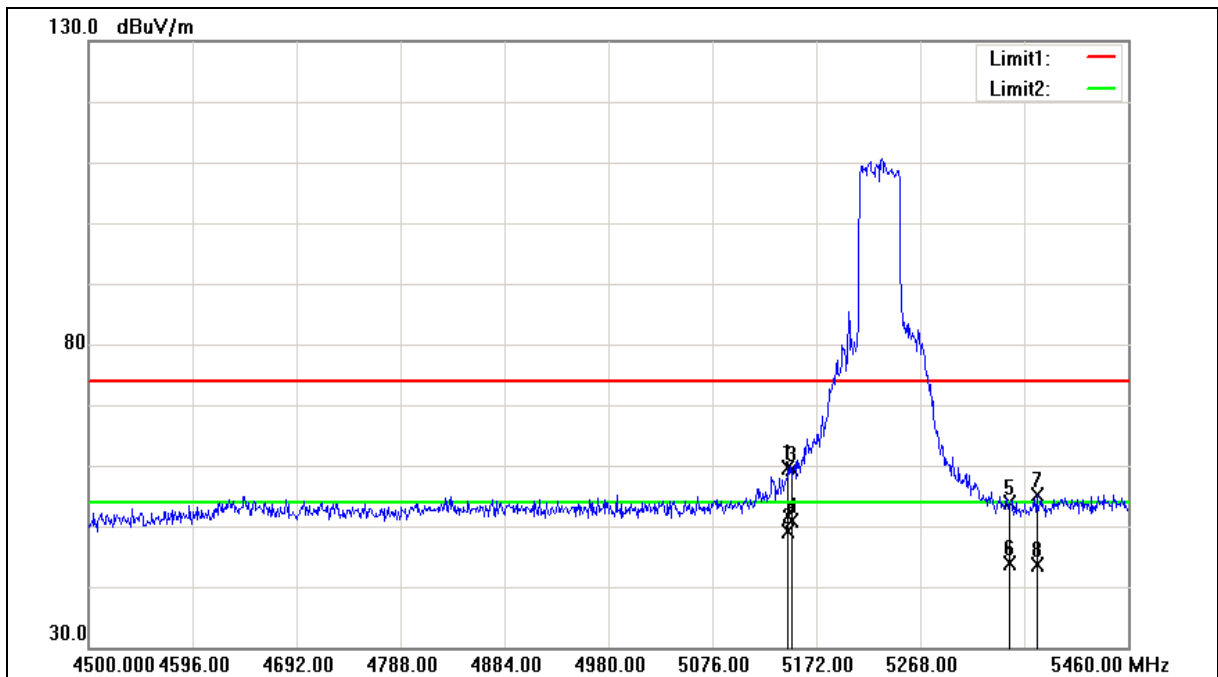
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/01/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5230MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/01/2017
Ant.Polar.:	Vertical		

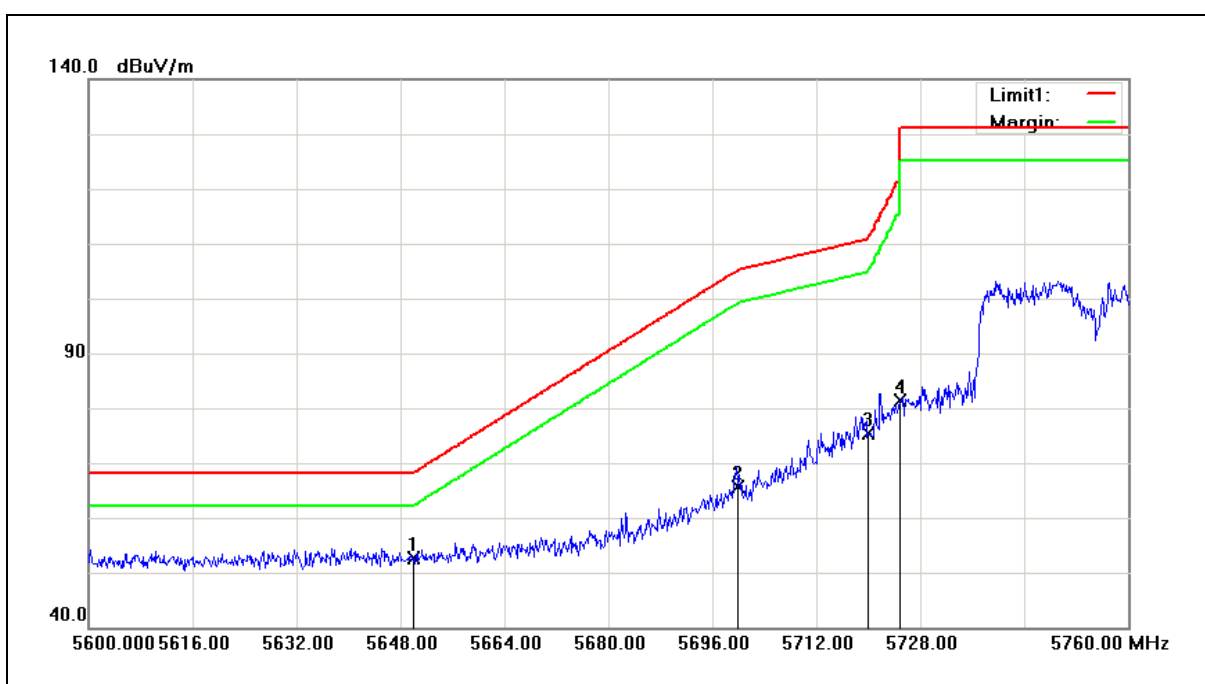
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5146.080	53.95	5.74	59.69	74.00	-14.31	peak
2	5146.080	43.42	5.74	49.16	54.00	-4.84	AVG
3	5150.000	53.57	5.75	59.32	74.00	-14.68	peak
4	5150.000	45.08	5.75	50.83	54.00	-3.17	AVG
5	5350.000	47.83	6.03	53.86	74.00	-20.14	peak
6	5350.000	37.76	6.03	43.79	54.00	-10.21	AVG
7	5375.520	49.14	6.09	55.23	74.00	-18.77	peak
8	5375.520	37.50	6.09	43.59	54.00	-10.41	AVG

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	46.07	6.58	52.65	68.20	-15.55	peak
2	5700.000	59.02	6.68	65.70	105.20	-39.50	peak
3	5720.000	68.77	6.73	75.50	110.80	-35.30	peak
4	5725.000	74.59	6.74	81.33	122.20	-40.87	peak

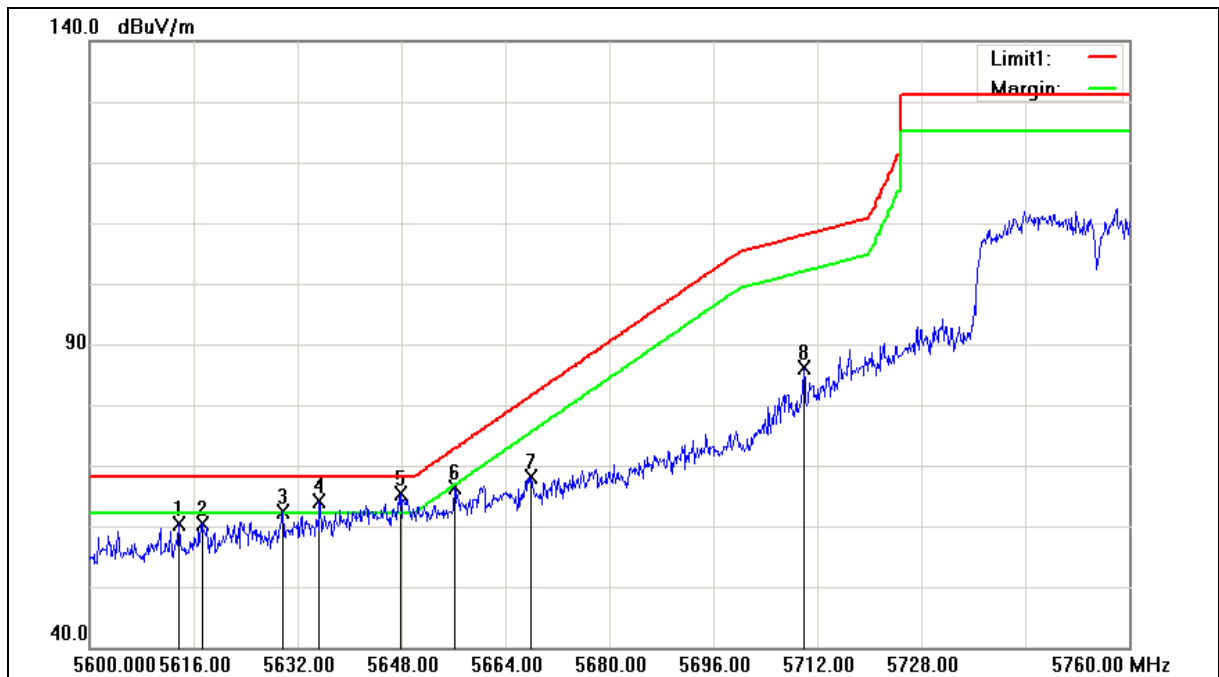
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5755MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		

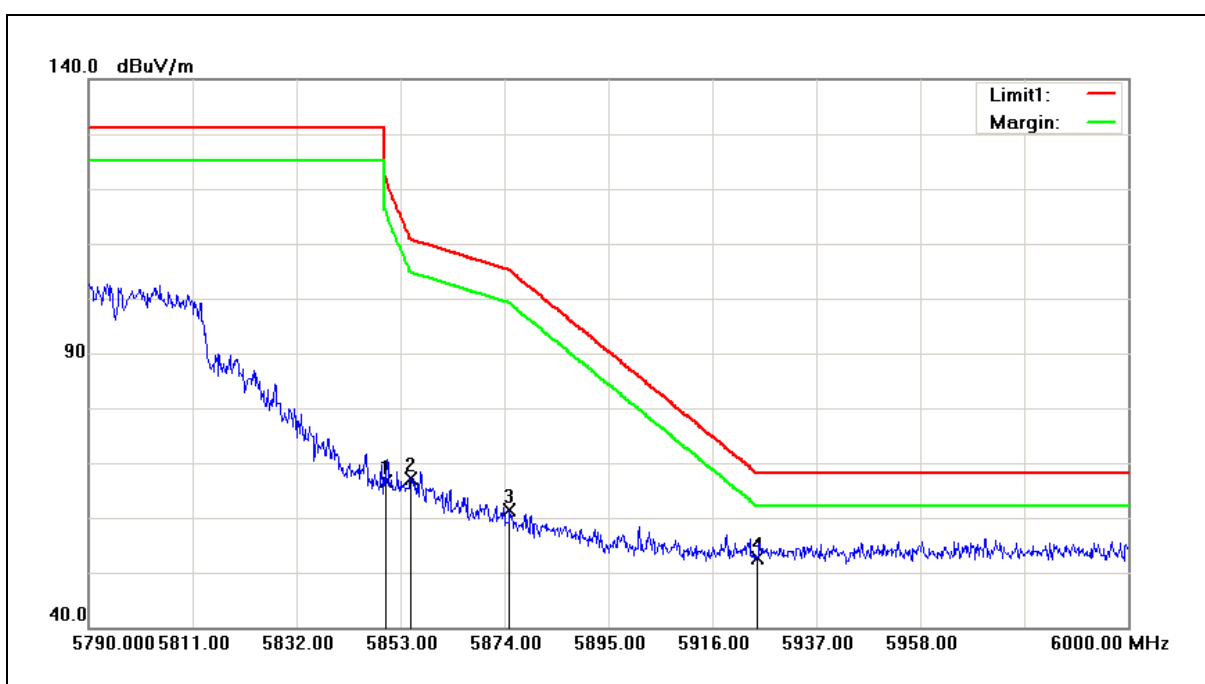
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5613.760	53.87	6.50	60.37	68.20	-7.83	peak
2	5617.280	53.89	6.50	60.39	68.20	-7.81	peak
3	5629.760	55.82	6.54	62.36	68.20	-5.84	peak
4	5635.360	57.60	6.55	64.15	68.20	-4.05	peak
5	5647.840	58.75	6.58	65.33	68.20	-2.87	peak
6	5656.160	59.83	6.59	66.42	72.76	-6.34	peak
7	5668.000	61.59	6.62	68.21	81.52	-13.31	peak
8	5709.920	79.37	6.70	86.07	107.98	-21.91	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5795MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5850.000	59.56	6.99	66.55	122.20	-55.65	peak
2	5855.000	60.03	7.00	67.03	110.80	-43.77	peak
3	5875.000	54.33	7.05	61.38	105.20	-43.82	peak
4	5925.000	45.40	7.16	52.56	68.20	-15.64	peak

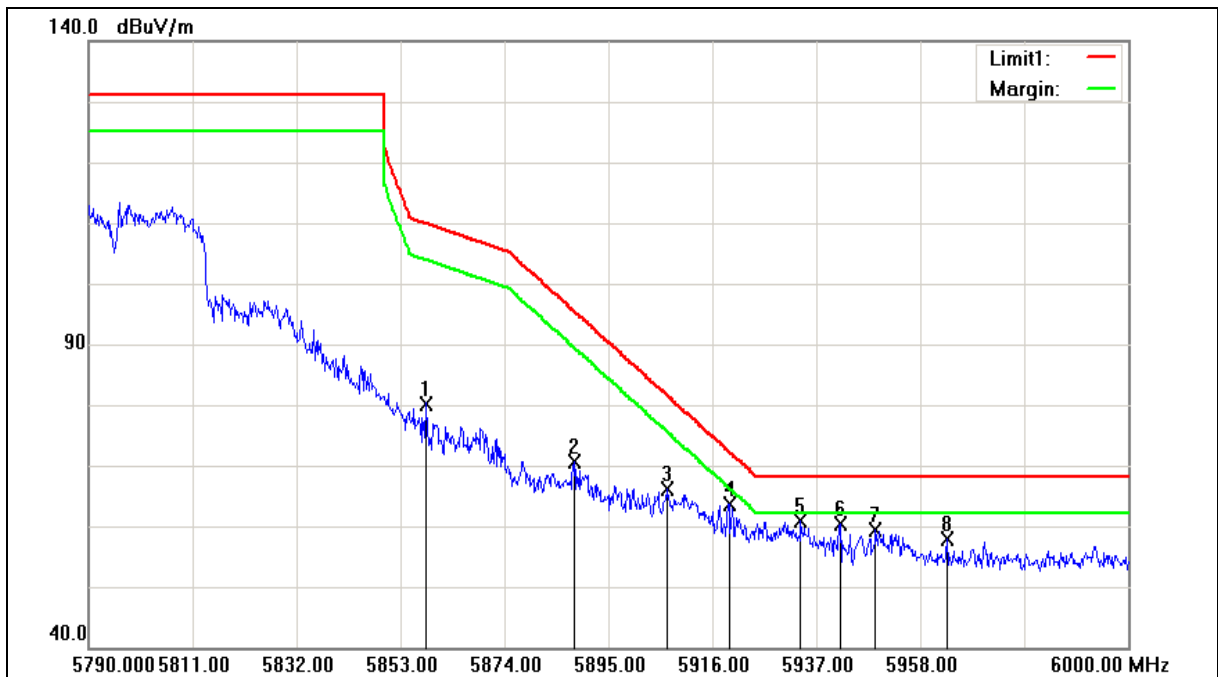
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5795MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5795MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	09/02/2017
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5858.040	73.24	7.01	80.25	109.95	-29.70	peak
2	5888.070	63.43	7.08	70.51	95.53	-25.02	peak
3	5906.760	59.00	7.12	66.12	81.70	-15.58	peak
4	5919.360	56.44	7.15	63.59	72.37	-8.78	peak
5	5933.850	53.65	7.18	60.83	68.20	-7.37	peak
6	5941.830	53.12	7.19	60.31	68.20	-7.89	peak
7	5948.970	52.08	7.21	59.29	68.20	-8.91	peak
8	5963.460	50.69	7.24	57.93	68.20	-10.27	peak

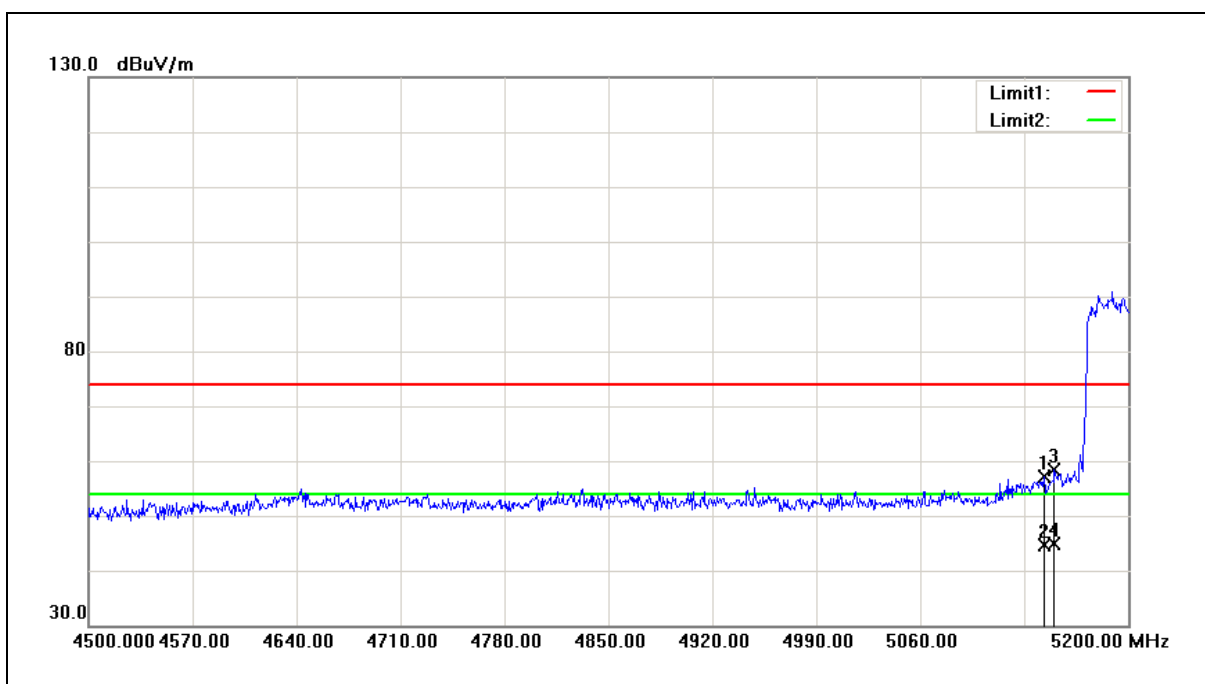
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/01/2017
Ant.Polar.:	Horizontal		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5143.300	51.31	5.74	57.05	74.00	-16.95	peak
2	5143.300	38.95	5.74	44.69	54.00	-9.31	AVG
3	5150.000	52.57	5.75	58.32	74.00	-15.68	peak
4	5150.000	39.07	5.75	44.82	54.00	-9.18	AVG

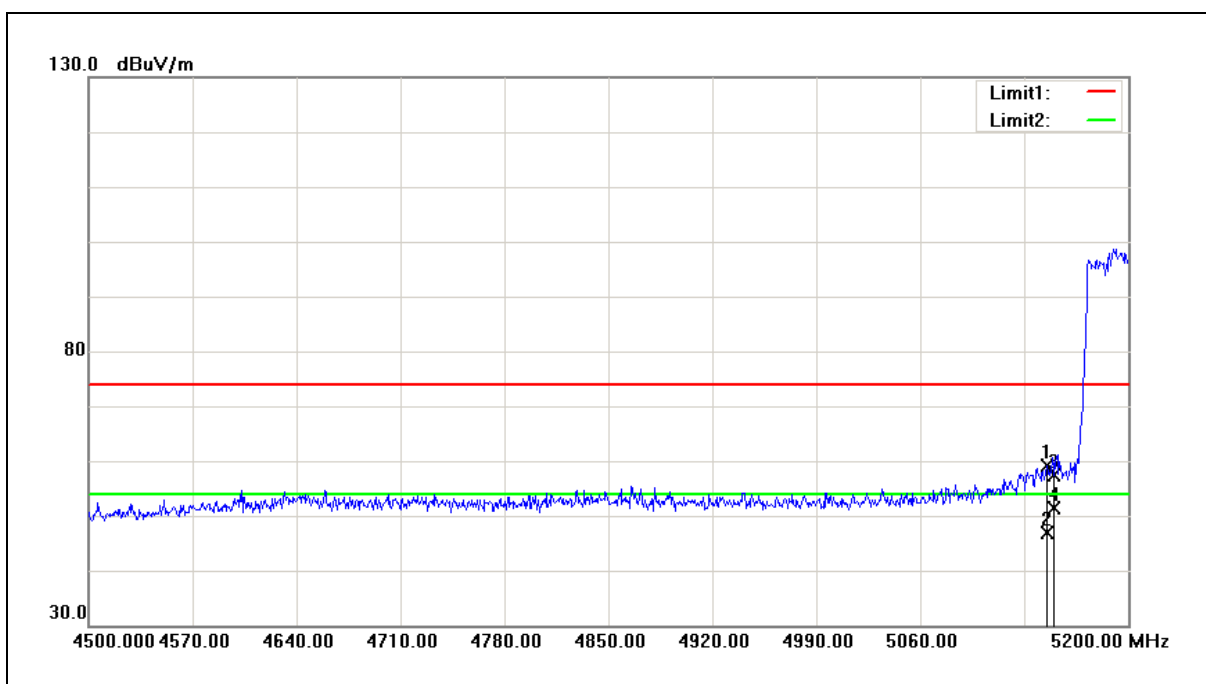
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5210MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/01/2017
Ant.Polar.:	Vertical		



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5145.400	53.33	5.74	59.07	74.00	-14.93	peak
2	5145.400	41.07	5.74	46.81	54.00	-7.19	AVG
3	5150.000	51.62	5.75	57.37	74.00	-16.63	peak
4	5150.000	45.73	5.75	51.48	54.00	-2.52	AVG

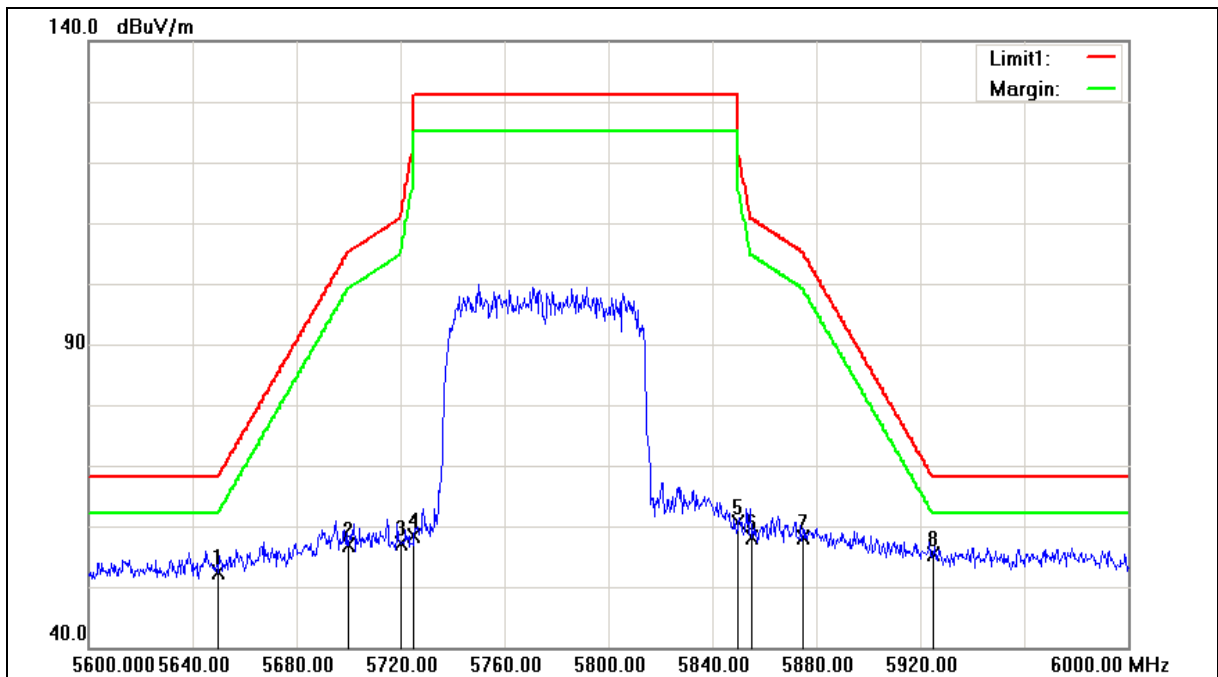
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Horizontal		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum. (%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5650.000	45.69	6.58	52.27	68.20	-15.93	peak
2	5700.000	50.12	6.68	56.80	105.20	-48.40	peak
3	5720.000	50.51	6.73	57.24	110.80	-53.56	peak
4	5725.000	51.75	6.74	58.49	122.20	-63.71	peak
5	5850.000	53.53	6.99	60.52	122.20	-61.68	peak
6	5855.000	51.06	7.00	58.06	110.80	-52.74	peak
7	5875.000	50.97	7.05	58.02	105.20	-47.18	peak
8	5925.000	48.33	7.16	55.49	68.20	-12.71	peak

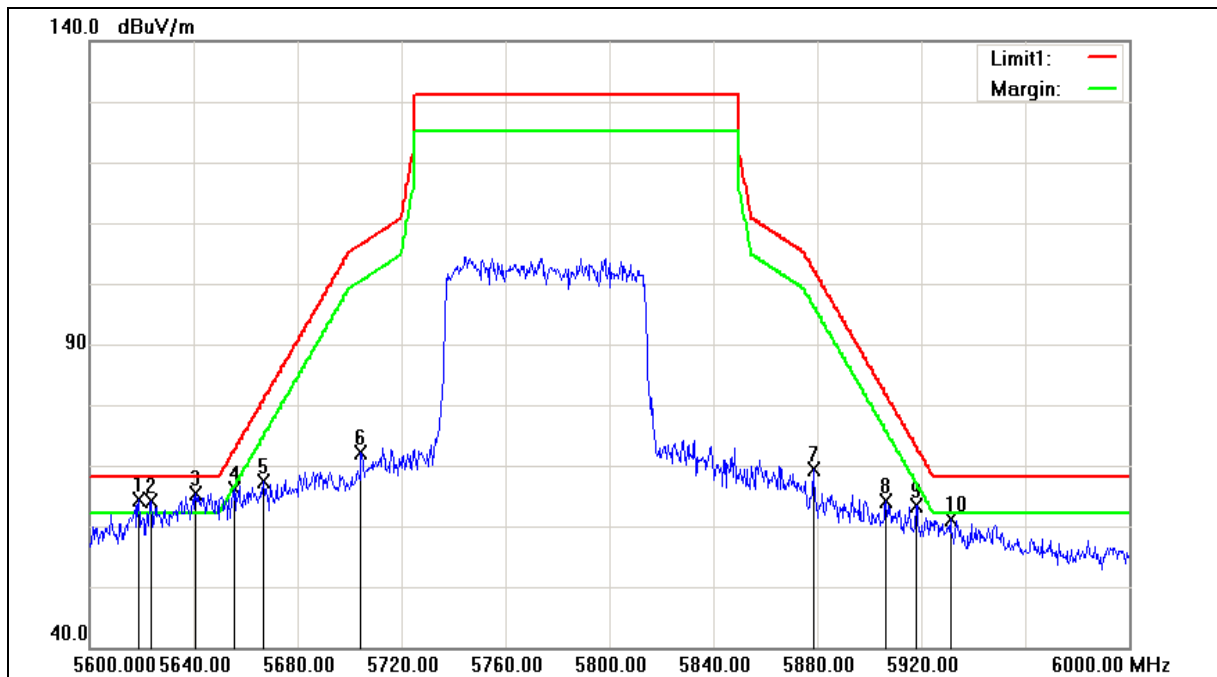
Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.



Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Vertical		





Standard:	FCC Part 15.407	Test Distance:	3m
Test item:	Band edge	Power:	AC 120V/60Hz
Frequency:	5775MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 5	Date:	09/02/2017
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	5618.800	57.95	6.51	64.46	68.20	-3.74	peak
2	5623.600	57.50	6.51	64.01	68.20	-4.19	peak
3	5640.800	58.82	6.56	65.38	68.20	-2.82	peak
4	5655.600	59.44	6.59	66.03	72.34	-6.31	peak
5	5666.800	60.67	6.61	67.28	80.63	-13.35	peak
6	5704.400	65.50	6.69	72.19	106.43	-34.24	peak
7	5878.400	62.38	7.06	69.44	102.68	-33.24	peak
8	5906.400	57.00	7.12	64.12	81.96	-17.84	peak
9	5918.000	56.22	7.15	63.37	73.38	-10.01	peak
10	5931.200	53.93	7.16	61.09	68.20	-7.11	peak

Note:1.Result (dBuV/m) = Correct Factor (dB/m) + Reading(dBuV).

2.Correction factor (dB/m) = Antenna Factor (dB/m) + Cable loss (dB) – Pre-Amplifier gain (dB).

3. When the peak results are less than average limit, so not need to evaluate the average.

4.4. Maximum Conducted Output Power Measurement & Additional Rule For Outdoor Operation

■ Limit

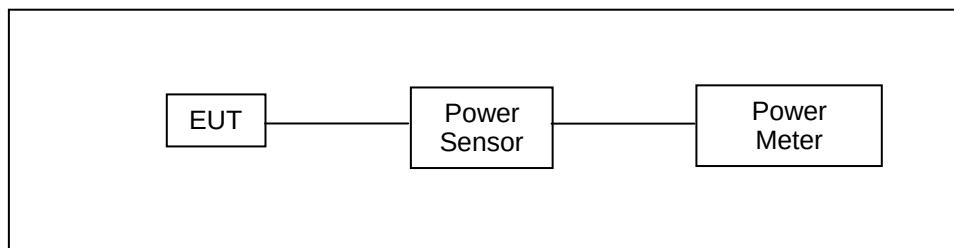
Frequency Range (MHz)	FCC Maximum Conducted Output Power Limit	Max_EIRP at any elevation angle > 30° form horizon
	Master	Outdoor AP Operation
5.150 ~ 5.250 GHz	The lesser of 1W (30dBm)	< 125 mW(21 dBm)
5.725 ~ 5.850 GHz	The lesser of 1W (30dBm)	NA

According FCC KDB 662911 D01 v02r01 – for power measurements on IEEE802.11 devices

- * CDD mode : Max. Gain = 6.18 dBi > 6dBi (5.150 ~ 5.250 GHz)
- * CDD mode : Max. Gain = 6.05 dBi > 6dBi (5.725 ~ 5.850 GHz)
- CCD mode power limit shall be reduced = $30 - 0.18 = 29.82$ dBm (5.150 ~ 5.250 GHz)
- CCD mode power limit shall be reduced = $30 - 0.05 = 29.95$ dBm (5.725 ~ 5.850 GHz)
- CDD mode : Max EIRP = Max. Total Output Power + Directional Gain (5.150 ~ 5.250 GHz)

- * BF mode : Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\}$
 $= 9.19$ dBi > 6dBi (5.150 ~ 5.250 GHz)
- * BF mode : Directional Gain = $10 \cdot \log\{[10^{(G1/20)} + 10^{(G2/20)} + \dots + 10^{(Gn/20)}]^2 / NANT\}$
 $= 9.06$ dBi > 6dBi (5.725 ~ 5.850 GHz)
- BF mode power limit shall be reduced = $30 - 3.19 = 26.81$ dBm (5.150 ~ 5.250 GHz)
- BF mode power limit shall be reduced = $30 - 3.06 = 26.94$ dBm (5.725 ~ 5.850 GHz)
- BF mode : Max EIRP = Max. Total Output Power + Directional Gain (5.150 ~ 5.250 GHz)

■ Test Setup



**■ Test Instruments**

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Power Sensor	Anritsu	MA2411B	1126022	08/28/2017	1 year
Power Meter	Anritsu	ML2495A	1135009	08/28/2017	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1 500	140303	02/22/2017	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

■ Test Procedure

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01r04, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices

Section (E) Maximum Conducted Output Power

3. Measurement using a Power Meter (PM)

b) Method PM-G (Measurement using a gated RF average power meter)

EIRP evaluation according to 789033 D02 General UNII Test Procedures New Rules v02r01 H.(1)(b)

Antenna measurement results such as antenna report presentation.

H. Measurement of emission at elevation angle higher than 30° from horizon

1. For fixed infrastructure, not electrically or mechanically steerable beam antenna

b) If elevation plane radiation pattern is not available, but the antenna type (such as dipole omnidirectional, Yagi, parabolic, or sector antenna) has symmetrical elevation plane pattern referenced at main beam and all lobes on the main beam elevation plane have highest gains, then the following measurement method is acceptable to determine compliance:

(i) Determine the device' s intended mounting elevation angle referenced to the horizon.

(ii) Rotate EUT antenna by 90° around the main beam axis in horizontal position to transform measurement in elevation angle into azimuth angle and define 0° reference angle based on device' s intended mounting elevation angle.

(iii) Move test antenna along the horizontal arc, or rotate the turn table with EUT antenna placed at the center, between 30° and 90° relative to the 0° reference angle, and then continuing down from 90° to 30° on the other side of the pattern, while maintaining the test antenna pointing with constant distance to the EUT antenna and search for the spot which

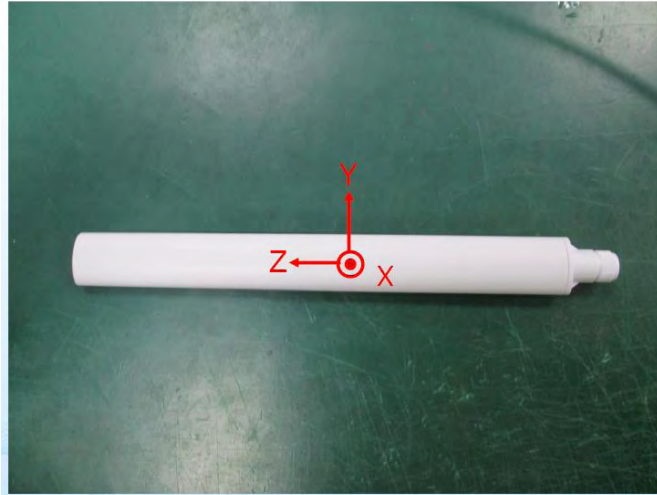
has the highest measured emission. Both horizontal and vertical polarization shall be investigated to find out the maximum radiated emission level.

Note: Moving of test antenna along the horizontal arc, or rotating the turn table, shall be performed in angular step size as small as possible, but not larger than 3°.

(iv) Calculate the EIRP based on the highest measured emission and compare to the limit of 125 mW to determine compliance.

(v) The antenna pattern measurements should be included in the filing.

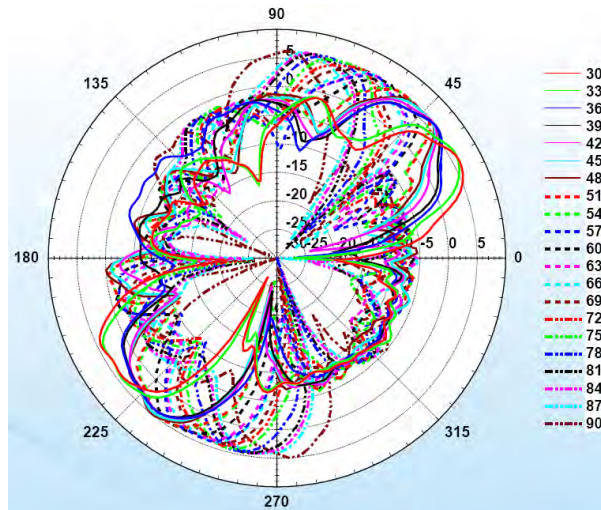
Antenna Configuration



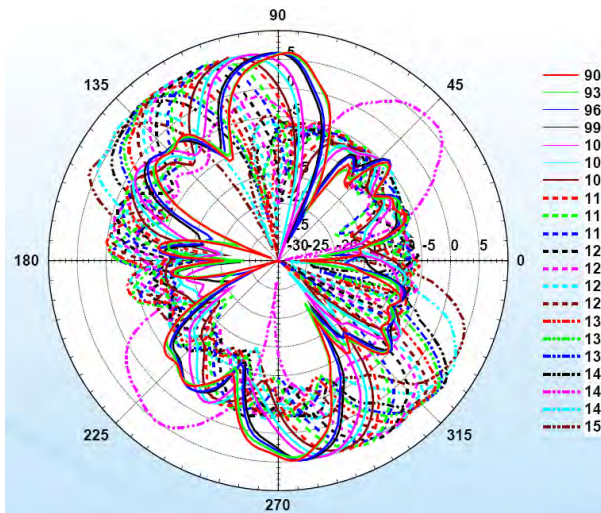
Peak Gain Table –5180MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)	Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	26	6.16	90	20	6.15
33	24	6.18	93	26	6.13
36	46	6.16	96	20	6.14
39	38	6.16	99	22	6.12
42	34	6.18	102	18	6.14
45	20	6.15	105	16	6.15
48	16	6.16	108	16	6.14
51	16	6.17	111	16	6.17
54	16	6.16	114	12	6.15
57	36	6.16	117	10	6.15
60	14	6.16	120	20	6.16
63	18	6.16	123	18	6.14
66	18	6.15	126	18	6.15
69	14	6.15	129	20	6.12
72	16	6.15	132	18	6.13
75	16	6.15	135	16	6.13
78	20	6.14	138	20	6.13
81	20	6.15	141	24	6.17
84	16	6.13	144	134	6.14
87	16	6.13	147	26	6.16
90	20	6.15	150	30	6.16

E-Plane Pattern 30deg to 90deg –5180MHz



E-Plane Pattern 90deg to 150deg –5180MHz

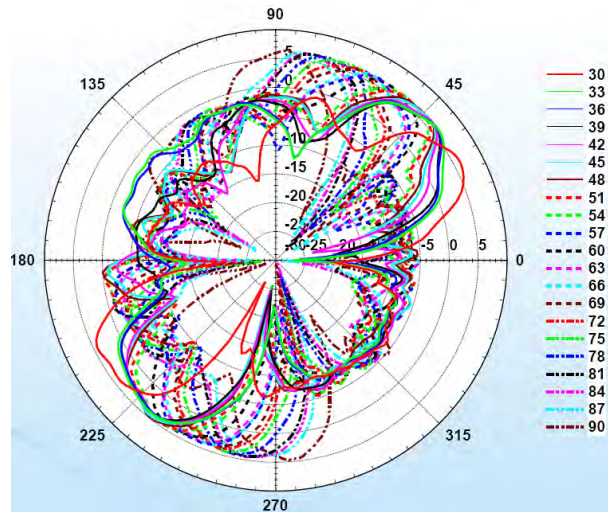




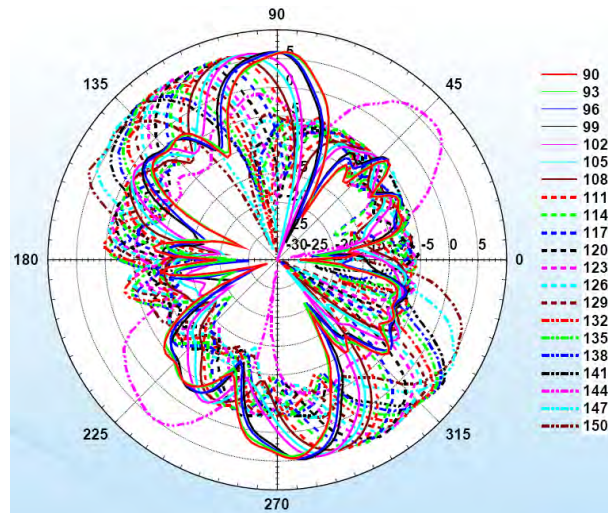
Peak Gain Table –5190MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)	Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	26	6.15	90	20	6.14
33	50	6.13	93	26	6.12
36	46	6.15	96	22	6.15
39	38	6.15	99	22	6.14
42	34	6.16	102	18	6.15
45	20	6.15	105	16	6.13
48	16	6.15	108	16	6.15
51	12	6.16	111	16	6.15
54	16	6.15	114	12	6.15
57	36	6.15	117	10	6.17
60	14	6.15	120	20	6.14
63	18	6.16	123	16	6.14
66	18	6.16	126	20	6.16
69	14	6.13	129	20	6.12
72	16	6.12	132	18	6.13
75	16	6.17	135	16	6.15
78	20	6.14	138	16	6.14
81	20	6.15	141	24	6.14
84	18	6.13	144	136	6.15
87	20	6.12	147	26	6.15
90	20	6.14	150	30	6.14

E-Plane Pattern 30deg to 90deg –5190MHz



E-Plane Pattern 90deg to 150deg –5190MHz

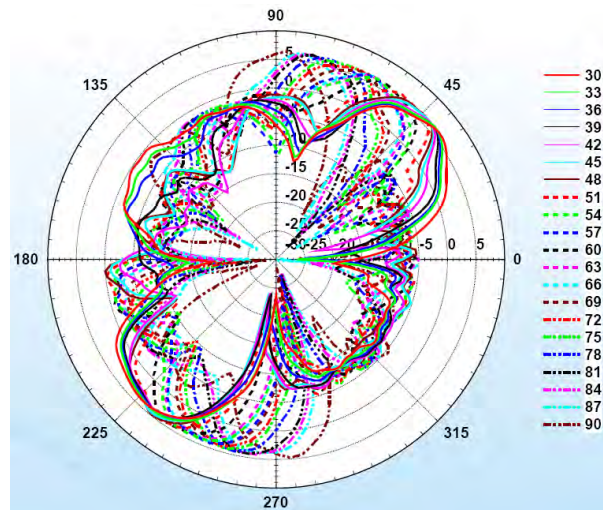




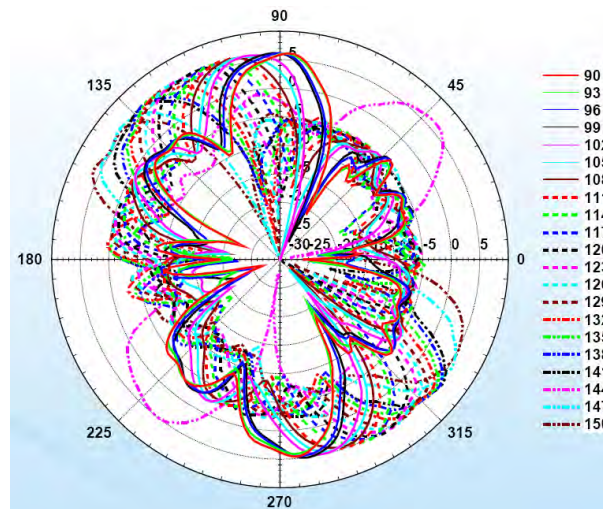
Peak Gain Table –5200MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)	Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.13	90	20	6.13
33	50	6.17	93	28	6.12
36	46	6.16	96	22	6.16
39	36	6.13	99	22	6.18
42	34	6.12	102	18	6.16
45	20	6.15	105	16	6.14
48	14	6.15	108	16	6.16
51	12	6.17	111	16	6.15
54	42	6.14	114	10	6.12
57	36	6.17	117	10	6.16
60	12	6.18	120	20	6.14
63	18	6.15	123	18	6.13
66	18	6.14	126	20	6.16
69	14	6.14	129	20	6.15
72	16	6.14	132	16	6.15
75	16	6.14	135	16	6.15
78	18	6.15	138	16	6.15
81	20	6.14	141	22	6.12
84	16	6.14	144	136	6.15
87	20	6.14	147	26	6.13
90	22	6.13	150	32	6.14

E-Plane Pattern 30deg to 90deg –5200MHz



E-Plane Pattern 90deg to 150deg –5200MHz

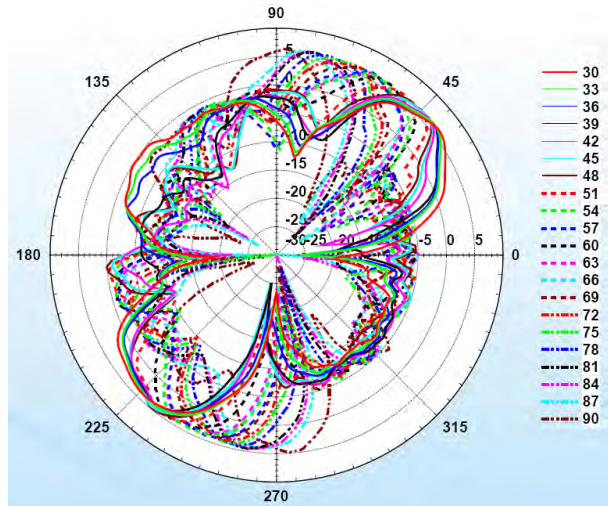




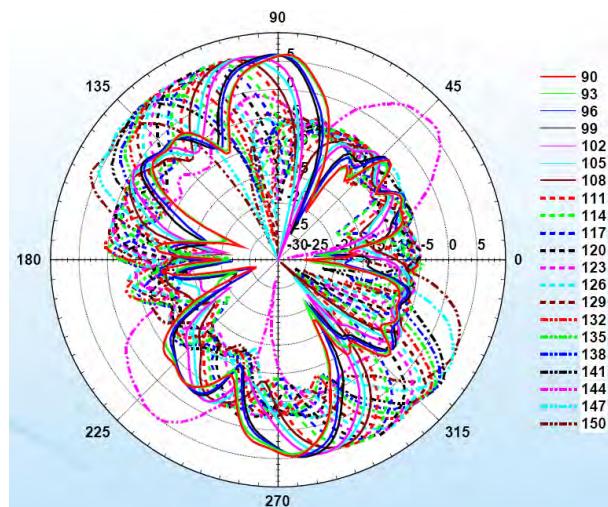
Peak Gain Table –5210MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)	Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.17	90	20	6.15
33	50	6.17	93	28	6.14
36	46	6.16	96	22	6.16
39	36	6.12	99	22	6.16
42	34	6.17	102	18	6.15
45	20	6.17	105	16	6.15
48	14	6.17	108	16	6.16
51	12	6.14	111	16	6.14
54	42	6.17	114	10	6.15
57	36	6.17	117	10	6.13
60	12	6.16	120	20	6.15
63	16	6.14	123	18	6.13
66	16	6.15	126	20	6.12
69	12	6.13	129	20	6.17
72	16	6.17	132	16	6.16
75	16	6.13	135	16	6.15
78	18	6.15	138	18	6.14
81	20	6.14	141	22	6.11
84	22	6.13	144	136	6.16
87	20	6.16	147	26	6.15
90	22	6.15	150	32	6.15

E-Plane Pattern 30deg to 90deg –5210MHz



E-Plane Pattern 90deg to 150deg –5210MHz

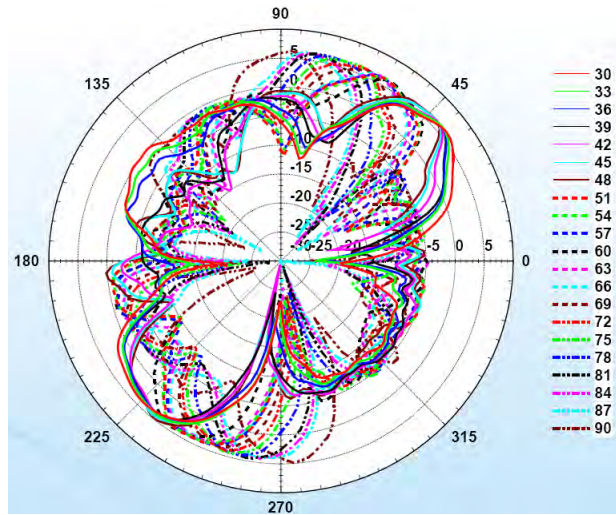




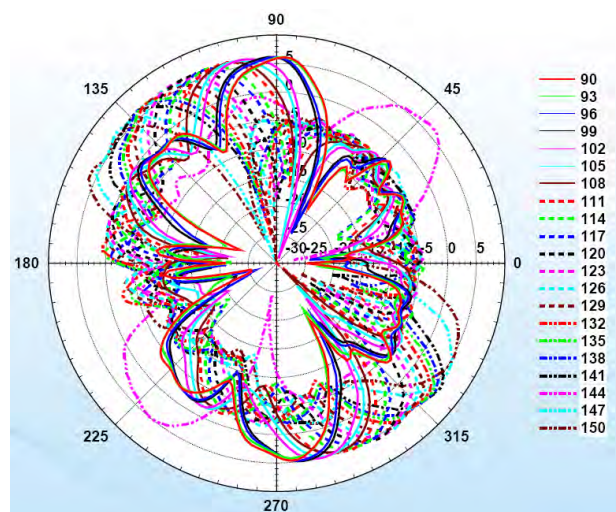
Peak Gain Table –5230MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)	Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.16	90	20	6.12
33	50	6.17	93	28	6.16
36	46	6.16	96	22	6.13
39	36	6.16	99	22	6.17
42	32	6.14	102	18	6.17
45	18	6.17	105	16	6.17
48	14	6.16	108	16	6.15
51	42	6.17	111	14	6.14
54	40	6.16	114	10	6.13
57	36	6.17	117	10	6.15
60	12	6.14	120	18	6.13
63	16	6.15	123	18	6.15
66	16	6.16	126	18	6.16
69	12	6.14	129	18	6.14
72	16	6.16	132	16	6.15
75	16	6.17	135	18	6.16
78	18	6.16	138	20	6.13
81	20	6.13	141	24	6.16
84	22	6.11	144	136	6.14
87	22	6.15	147	26	6.12
90	20	6.12	150	34	6.14

E-Plane Pattern 30deg to 90deg –5230MHz



E-Plane Pattern 90deg to 150deg –5230MHz

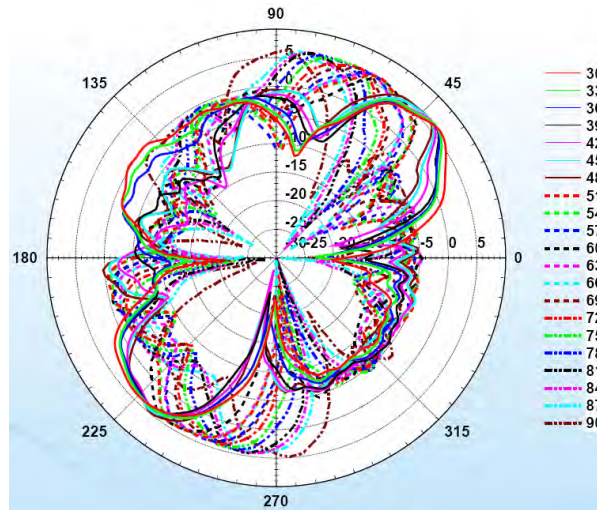




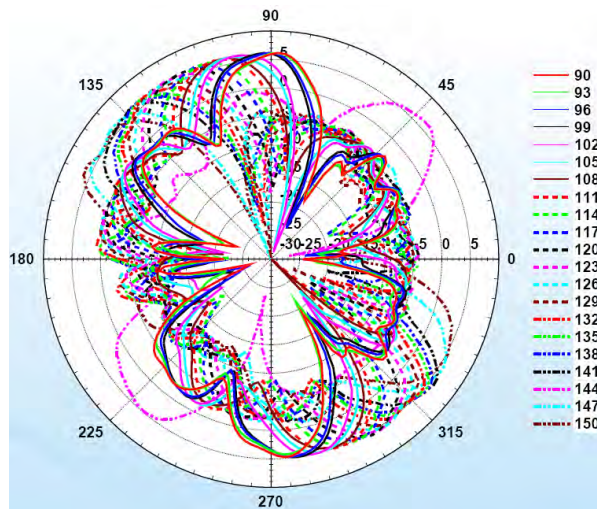
Peak Gain Table –5240MHz

Deg.	Phi Cut Deg.	Peak Gain (dBi)	Deg.	Phi Cut Deg.	Peak Gain (dBi)
30	52	6.16	90	20	6.16
33	50	6.16	93	26	6.16
36	46	6.17	96	20	6.16
39	36	6.15	99	20	6.15
42	32	6.16	102	18	6.16
45	18	6.17	105	16	6.15
48	16	6.15	108	16	6.14
51	40	6.16	111	14	6.13
54	40	6.16	114	10	6.14
57	34	6.16	117	10	6.11
60	12	6.16	120	18	6.17
63	16	6.13	123	18	6.17
66	16	6.15	126	18	6.16
69	12	6.15	129	18	6.16
72	16	6.16	132	18	6.15
75	16	6.15	135	18	6.15
78	18	6.16	138	20	6.13
81	20	6.17	141	24	6.14
84	20	6.16	144	136	6.16
87	22	6.15	147	26	6.16
90	20	6.16	150	34	6.13

E-Plane Pattern 30deg to 90deg –5240MHz



E-Plane Pattern 90deg to 150deg –5240MHz



Test Result

Test Item		Maximum Conducted Output Power						
Test Mode		Mode 2: IEEE 802.11a Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5180	6M	12.91	0.020	9.66	0.009	14.59	0.029	≤ 29.82
5200		13.07	0.020	9.80	0.010	14.75	0.030	
5220		12.86	0.019	9.58	0.009	14.53	0.028	
5240		13.07	0.020	9.76	0.009	14.73	0.030	
5745		16.73	0.047	15.10	0.032	19.00	0.079	≤ 29.95
5765		16.91	0.049	15.36	0.034	19.21	0.083	
5785		16.40	0.044	14.70	0.030	18.64	0.073	
5805		16.59	0.046	15.05	0.032	18.90	0.078	
5825		16.50	0.045	15.34	0.034	18.97	0.079	
5180	54M	12.66	0.018	9.45	0.009	14.36	0.027	≤ 29.82
5200		12.85	0.019	9.52	0.009	14.51	0.028	
5220		12.60	0.018	9.40	0.009	14.30	0.027	
5240		12.80	0.019	9.52	0.009	14.47	0.028	
5745		16.50	0.045	14.91	0.031	18.79	0.076	≤ 29.95
5765		16.67	0.046	15.12	0.033	18.97	0.079	
5785		16.12	0.041	14.45	0.028	18.38	0.069	
5805		16.28	0.042	14.74	0.030	18.59	0.072	
5825		16.32	0.043	15.10	0.032	18.76	0.075	

Note: The relevant measured result has the offset with cable loss already.



Test Item		Maximum Conducted Output Power						
Test Mode		Mode 3: IEEE 802.11ac 20MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5180	13M	12.92	0.020	9.85	0.010	14.66	0.029	≤ 29.82
5200		12.72	0.019	9.51	0.009	14.42	0.028	
5220		12.86	0.019	9.76	0.009	14.59	0.029	
5240		13.03	0.020	9.88	0.010	14.74	0.030	
5745		17.01	0.050	15.50	0.035	19.33	0.086	≤ 29.95
5765		17.26	0.053	15.83	0.038	19.61	0.091	
5785		17.53	0.057	16.26	0.042	19.95	0.099	
5805		17.78	0.060	16.65	0.046	20.26	0.106	
5825		17.20	0.052	16.41	0.044	19.83	0.096	
5180	173.4M	12.67	0.018	9.52	0.009	14.38	0.027	≤ 29.82
5200		12.48	0.018	9.26	0.008	14.17	0.026	
5220		12.58	0.018	9.52	0.009	14.32	0.027	
5240		12.71	0.019	9.62	0.009	14.44	0.028	
5745		16.79	0.048	15.28	0.034	19.11	0.081	≤ 29.95
5765		17.01	0.050	15.53	0.036	19.34	0.086	
5785		17.24	0.053	15.95	0.039	19.65	0.092	
5805		17.54	0.057	16.41	0.044	20.02	0.101	
5825		16.99	0.050	16.21	0.042	19.63	0.092	

Note: The relevant measured result has the offset with cable loss already.



Test Item		Maximum Conducted Output Power						
Test Mode		Mode 4: IEEE 802.11ac 40MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5190	27M	12.40	0.017	9.12	0.008	14.07	0.026	≤ 29.82
5230		12.93	0.020	9.56	0.009	14.57	0.029	
5755		18.27	0.067	16.29	0.043	20.40	0.110	≤ 29.95
5795		18.85	0.077	19.40	0.087	22.14	0.164	
5190	400M	12.15	0.016	8.85	0.008	13.82	0.024	≤ 29.82
5230		12.62	0.018	9.32	0.009	14.29	0.027	
5755		17.98	0.063	16.02	0.040	20.12	0.103	≤ 29.95
5755		18.52	0.071	19.14	0.082	21.85	0.153	

Test Item		Maximum Conducted Output Power						
Test Mode		Mode 5: IEEE 802.11ac 80MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5210	58.6M	9.15	0.008	6.33	0.004	10.98	0.013	≤ 29.82
5775		15.20	0.033	13.27	0.021	17.35	0.054	≤ 29.95
5210	866.6M	8.82	0.008	6.12	0.004	10.69	0.012	≤ 29.82
5775		14.91	0.031	12.95	0.020	17.05	0.051	≤ 29.95

Note: The relevant measured result has the offset with cable loss already.



Test Item		Max_EIRP at any elevation angle > 30° form horizon				
Test Mode		Mode 2: IEEE 802.11a Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0+1	Directional Gain	Max_EIRP		FCC Limit (dBm)
		Max. Output Power		(dBm)	(W)	
5180	6M	14.59	6.18	20.77	0.119	< 21
5200		14.75	6.18	20.93	0.124	
5220		14.53	6.18	20.71	0.118	
5240		14.73	6.18	20.91	0.123	
5180	54M	14.36	6.18	20.54	0.113	< 21
5200		14.51	6.18	20.69	0.117	
5220		14.30	6.18	20.48	0.112	
5240		14.47	6.18	20.65	0.116	

Test Item		Max_EIRP at any elevation angle > 30° form horizon				
Test Mode		Mode 3: IEEE 802.11ac 20MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0+1	Directional Gain	Max_EIRP		FCC Limit (dBm)
		Max. Output Power		(dBm)	(W)	
5180	13M	14.66	6.18	20.84	0.121	< 21
5200		14.42	6.18	20.60	0.115	
5220		14.59	6.18	20.77	0.119	
5240		14.74	6.18	20.92	0.124	
5180	173.4M	14.38	6.18	20.56	0.114	< 21
5200		14.17	6.18	20.35	0.108	
5220		14.32	6.18	20.50	0.112	
5240		14.44	6.18	20.62	0.115	

Note: The relevant measured result has the offset with cable loss already.



Test Item		Max_EIRP at any elevation angle > 30° form horizon				
Test Mode		Mode 4: IEEE 802.11ac 40MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0+1	Directional Gain	Max_EIRP		FCC Limit (dBm)
		Max. Output Power				
		(dBm)		(dBi)	(dBm)	
5190	27M	14.07	6.18	20.25	0.106	< 21
5230		14.57	6.18	20.75	0.119	
5190	400M	13.82	6.18	20.00	0.100	< 21
5230		14.29	6.18	20.47	0.111	

Test Item		Max_EIRP at any elevation angle > 30° form horizon				
Test Mode		Mode 5: IEEE 802.11ac 80MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0+1	Directional Gain	Max_EIRP		FCC Limit (dBm)
		Max. Output Power				
		(dBm)	(dBi)	(dBm)	(W)	
5210	58.6M	10.98	6.18	17.16	0.052	< 21
5210	866.6M	10.69	6.18	16.87	0.049	< 21

Note: The relevant measured result has the offset with cable loss already.



Beamforming on

Test Item		Maximum Conducted Output Power						
Test Mode		Mode 3: IEEE 802.11ac 20MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5180	13M	9.64	0.009	6.89	0.005	11.49	0.014	≤ 26.81
5200		10.01	0.010	7.03	0.005	11.78	0.015	
5220		9.78	0.010	6.82	0.005	11.56	0.014	
5240		9.98	0.010	6.89	0.005	11.71	0.015	
5745		15.85	0.038	13.90	0.025	17.99	0.063	≤ 26.94
5765		16.11	0.041	14.28	0.027	18.30	0.068	
5785		16.41	0.044	14.64	0.029	18.62	0.073	
5805		16.64	0.046	15.01	0.032	18.91	0.078	
5825		15.66	0.037	14.36	0.027	18.07	0.064	
5180	173.4M	9.37	0.009	6.64	0.005	11.23	0.013	≤ 26.81
5200		9.71	0.009	6.81	0.005	11.51	0.014	
5220		9.52	0.009	6.57	0.005	11.30	0.013	
5240		9.73	0.009	6.62	0.005	11.46	0.014	
5745		15.53	0.036	13.68	0.023	17.71	0.059	≤ 26.94
5765		15.78	0.038	13.96	0.025	17.97	0.063	
5785		16.17	0.041	14.40	0.028	18.38	0.069	
5805		16.43	0.044	14.74	0.030	18.68	0.074	
5825		15.47	0.035	14.13	0.026	17.86	0.061	

Note: The relevant measured result has the offset with cable loss already.



Test Item		Maximum Conducted Output Power						
Test Mode		Mode 4: IEEE 802.11ac 40MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5190	27M	9.72	0.009	6.60	0.005	11.44	0.014	≤ 26.81
5230		9.77	0.009	6.53	0.004	11.46	0.014	
5755		16.74	0.047	14.67	0.029	18.84	0.077	≤ 26.94
5795		18.29	0.067	16.97	0.050	20.69	0.117	
5190	400M	9.52	0.009	6.31	0.004	11.22	0.013	≤ 26.81
5230		9.50	0.009	6.29	0.004	11.20	0.013	
5755		16.50	0.045	14.36	0.027	18.57	0.072	≤ 26.94
5755		17.98	0.063	16.68	0.047	20.39	0.109	

Test Item		Maximum Conducted Output Power						
Test Mode		Mode 5: IEEE 802.11ac 80MHz Continuous TX mode						
Frequency (MHz)	Data Rate	ANT-0		ANT-1		ANT-0+1		FCC Limit (dBm)
		Max. Output Power						
		(dBm)	(W)	(dBm)	(W)	(dBm)	(W)	
5210	58.6M	7.69	0.006	4.78	0.003	9.48	0.009	≤ 26.81
5775		13.76	0.024	11.72	0.015	15.87	0.039	≤ 26.94
5210	866.6M	7.45	0.006	4.55	0.003	9.25	0.008	≤ 26.81
5775		13.50	0.022	11.48	0.014	15.62	0.036	≤ 26.94

Note: The relevant measured result has the offset with cable loss already.



Test Item		Max_EIRP at any elevation angle > 30° form horizon				
Test Mode		Mode 3: IEEE 802.11ac 20MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0+1	Directional Gain	Max_EIRP		FCC Limit (dBm)
		Max. Output Power		(dBm)	(W)	
		(dBm)	(dBi)	(dBm)	(W)	
5180	13M	11.49	9.19	20.68	0.117	< 21
5200		11.78	9.19	20.97	0.125	
5220		11.56	9.19	20.75	0.119	
5240		11.71	9.19	20.90	0.123	
5180	173.4M	11.23	9.19	20.42	0.110	< 21
5200		11.51	9.19	20.70	0.117	
5220		11.30	9.19	20.49	0.112	
5240		11.46	9.19	20.65	0.116	

Test Item		Max_EIRP at any elevation angle > 30° form horizon				
Test Mode		Mode 4: IEEE 802.11ac 40MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0+1	Directional Gain	Max_EIRP		FCC Limit (dBm)
		Max. Output Power		(dBm)	(W)	
		(dBm)	(dBi)	(dBm)	(W)	
5190	27M	11.44	9.19	20.63	0.116	< 21
5230		11.46	9.19	20.65	0.116	
5190	400M	11.22	9.19	20.41	0.110	< 21
5230		11.20	9.19	20.39	0.109	

Test Item		Max_EIRP at any elevation angle > 30° form horizon				
Test Mode		Mode 5: IEEE 802.11ac 80MHz Continuous TX mode				
Frequency (MHz)	Data Rate	ANT-0+1	Directional Gain	Max_EIRP		FCC Limit (dBm)
		Max. Output Power		(dBm)	(W)	
		(dBm)	(dBi)	(dBm)	(W)	
5210	58.6M	9.48	9.19	18.67	0.074	< 21
5210	866.6M	9.25	9.19	18.44	0.070	< 21

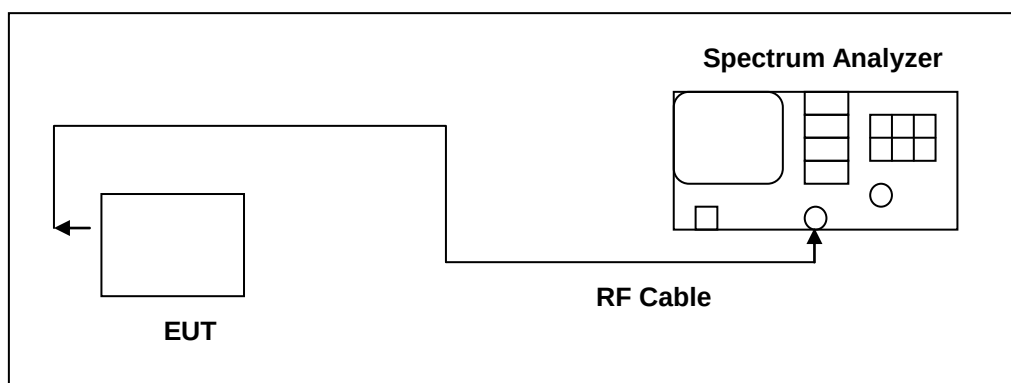
Note: The relevant measured result has the offset with cable loss already.

4.5. 26dB RF Bandwidth & 99 % Occupied Bandwidth Measurement

■ Limit

N/A

■ Test Setup



■ Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY45300744	12/19/2016	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1 500	140303	02/22/2017	1 year
Test Site	ATL	TE05	TE05	N.C.R.	-----

Note: N.C.R. = No Calibration Request.

■ Test Procedure

The test is performed in accordance with KDB789033: D02 General UNII Test Procedures New Rules v01r04, Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - Part 15, Subpart E.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	>26dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW > RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto